

Technical Report 1278

A DEVELOPMENTAL MODEL OF CROSS-CULTURAL COMPETENCE AT THE TACTICAL LEVEL

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**United States Army Research Institute
for the Behavioral and Social Sciences**

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A DEVELOPMENTAL MODEL OF CROSS-CULTURAL COMPETENCE AT THE TACTICAL LEVEL

EXECUTIVE SUMMARY

Research Requirement:

Non-kinetic engagements in multi-cultural settings are becoming the norm for deployed Soldiers, and the ability to operate effectively within these environments is critical to mission success. Soldiers must be able to rapidly adapt to unfamiliar surroundings without extensive prior knowledge of the region or its people. Ongoing training development efforts are addressing the need for general cross-cultural competence (3C). However, to ensure that these training programs are successful at improving 3C, one must operationalize this competence. To support these goals, this research effort sought to identify the critical components of 3C, describe how 3C develops in these Soldiers, and infer how that competence may support performance on a mission. The overall objective for this portion of our effort was to develop an Army mission-centric model that describes the critical components of 3C, the relationships among these factors, and how these factors manifest at various stages of development.

A model was developed to describe various cognitive, affective, and behavioral competencies of Soldiers at four levels of development. The model was informed by several types of research methods with Soldiers who had a wide range of cross-cultural experience. The current model incorporates relevant features of existing general and domain-specific competence models. In addition, it includes examples of experiences and impressions of cultural trainers and Soldiers who are highly adaptable in cross-cultural settings. The model describes the continuous development of competence in successive levels, based on the key factors that may predict Soldier performance in novel cultural environments. The purpose of the model is to provide a framework for creating an online assessment tool of 3C as a next step in this effort.

Procedure:

Multiple sources and methods were used as the basis of the modeling effort. We conducted a thorough review of existing models of expertise acquisition. We also collected critical incidents reports, conducted team ranking interviews, and developed and implemented simulation interviews. These multiple sources of information informed a developmental model of 3C.

Findings:

Integration of data across the multiple sources allowed us to gather descriptions of different levels of development of 3C. These level descriptions are based on the knowledge, skills, attitudes, and abilities (KSAAs) that may support performance at different levels. These findings provided the basis for the development of a model of predictors of performance.

Five components of 3C were identified as a result of the data analysis: Cultural Maturity, Cognitive Flexibility, Cultural Knowledge, Cultural Acuity, and Interpersonal Skills. These five components are comprised of various KSAs as supported by our findings. These factors and their corresponding KSAs were used as a basis for identifying cognitive, affective, and behavioral characteristics of a Soldier that describe the four levels of 3C development: Pre-Competent, Beginner, Intermediate, and Advanced.

Utilization and Dissemination of Findings:

The model identifies the components that contribute to the development of 3C and support successively more proficient performance. Additionally, the model establishes a foundation from which to create an online tool that measures competence of an individual Soldier and provides feedback to support improvement in performance. Such an assessment tool is the ultimate goal of this effort. The tool will also be useful for evaluating the effectiveness of cross-cultural training initiatives. This model is specifically focused on understanding tactical level operations, but can be customized for applications across domains, both within and outside military settings.

A DEVELOPMENTAL MODEL OF CROSS-CULTURAL COMPETENCE AT THE TACTICAL LEVEL

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Cultural awareness has become an increasingly important competency for small-unit leaders... *Different solutions are required in different cultural contexts.* Effective small-unit leaders adapt to new situations, realizing their words and actions may be interpreted differently in different cultures. Like all other competencies, cultural awareness requires self-awareness, self-directed learning, and adaptability (Counterinsurgency Field Manual, 2006, 7-16).

Within this effort, we are defining cross-cultural competence (3C) as the affective, cognitive, and behavioral KSAs (knowledge, skills, attitudes, and abilities) that predict effective mission performance in cross-cultural settings. In a previous report, we outlined an initial model of 3C to provide the foundation for developing an assessment tool for this critical domain of expertise (McCloskey, Grandjean, Behymer, & Ross, in publication). In this effort, we refined the KSAs derived from previous research through a multi-faceted empirical study to derive five competence factors. The derived model describes the development of knowledge, skills, attitudes, and abilities that contribute to cross-cultural competence. This model will be used as a foundation for the development of an assessment system.

The need to clearly articulate and assess this domain of expertise is based on an emerging recognition that 3C is key to mission success in military engagements involving cross-cultural interactions. Recognition of the value of 3C is evidenced by research literature, implementation of training programs, and emphasis on understanding of cultures, that are slowly making their way into doctrinal publications such as The U.S. Army Stability Operations Field Manual (Department of the Army, 2008) and The U.S. Army/Marine Corps Counterinsurgency Field Manual (Department of the Army, 2006), to name a few. For example, according to The U.S. Army Stability Operations Field Manual: U.S. Army Field Manual, some tasks that involve an integrated approach to stability operations include: 1) establish civil security (ensuring a safe and secure environment); 2) establish civil control (establishing the rule of law); 3) restore essential services (humanitarian assistance and social well-being); 4) support to governance (promoting a stable government and participation); and, 5) support to economic infrastructure development (promoting a sustainable economy). The common theme across all of these tasks is the need to interact effectively with foreign nationals as well as with other coalition forces.

Further, even within many missions that have a primary kinetic component, the importance of effective interactions with local nationals and coalition forces remains. For example, while an operation to forcibly remove or eliminate insurgents from a village may require the use of lethal force, that operation will likely have a higher chance for success if the Soldiers conducting it can elicit valuable intelligence from local nationals and work smoothly with partnering coalition forces. While accurate cultural assessments and effective cultural actions can support success across mission types in the current operating environment, the countries and regions where the Army will conduct these missions in the future cannot all be predicted.

Abundant literature in the military community discusses the requirements to operate across cultural boundaries, but often does not discriminate between general intercultural skills needed in any intercultural setting and the knowledge and skills needed for specific countries or cultures. This lack of distinction creates difficulty in defining and assessing 3C. Some military publications do acknowledge a general framework or approach to understanding multiple cultures (Briceno, 2009; Chandler, 2005; Dunne, 2009; Lewis, 2006).

In the current effort, as we sought to define and describe 3C, we addressed primarily high contact roles in recent Army missions. A majority of our data collections involved Civil Affairs and Special Forces Soldiers, Military Transition Teams, and other Soldiers who had daily interactions with local populaces during deployment (e.g., conducting security patrols, training with local police forces, living amongst citizens in remote villages, etc.). We acknowledge the difficulties of distinguishing general competence from competence that is specific to limited regions of the world where the Army is primarily operating at this time. Additionally, our work is largely at the tactical level, i.e., field implementation. In an article on the “strategic corporal,” Marine Corps General Charles C. Krulak (1999) found that lower-ranking personnel were often the most prominent representatives of American foreign policy. Across humanitarian assistance, stability and reconstruction, and traditional kinetic operations, outcomes often hinged on decisions made by small-unit leaders rather than the officer in charge. Krulak reported that these strategic corporals influence not only immediate tactical situations, but also higher operational and strategic levels. This observation is even more applicable today. Soldiers perform diverse duties such as serving as town mayor of an Iraqi village, negotiating with tribal leaders in Afghanistan, and training indigenous forces worldwide (Stringer, 2009). No matter what the job, rank, or mission, the importance of building interpersonal relationships across cultural boundaries is an essential component of mission success. Tactical operations with high-contact tasks and missions are an important starting point for defining and describing cross-cultural competence.

Our goal is to construct an assessment tool that integrates the existing constructs from non-military domains and empirical findings from the current research. This foundation and tool can serve as a first step toward supporting cross-cultural operational readiness for Army missions. Thus, assessment can begin to guide training and other decisions, and future work can expand within a consistent model.

In the next section, we describe the perspectives informing our modeling efforts including our theory of 3C development, the derivation of constructs comprising 3C, and the challenges to defining 3C. These elements informed our data collection and analysis, as well as the structure of the resulting model.

Perspectives Guiding Model Development

Cross-cultural competence is a domain of expertise that has only recently become valued by the Army (Department of the Army, 2009). A theory of development of 3C mitigates the risk of theorizing about general performance based on specific aspects of existing operations. With a theory of development, we can more confidently integrate empirical findings based on current theaters of war, high contact tasks and missions, and tactical performance to inform the structure. To create a general theory of development that is appropriate for the cross-culture competence

domain, we investigated a number of models from previous research. In this section, we describe our developmental theory, the basis for the theory in the literature, and the implications for our work.

The Developmental Model of Intercultural Sensitivity (Bennett, 1993), the General Stage Model of Cognitive Skill Acquisition (Ross, Phillips, Klein, & Cohn, 2005; Ross, Phillips, & Cohn, 2009), and the General Framework for Cross-Cultural Competence (Abbe, Gulick, & Herman, 2007) are the primary models that supported our theory of development (McCloskey, Grandjean, Behymer & Ross, in publication). Our theory of cross-cultural competence development is based on several assertions drawn from these models.

- First, there are cognitive, affective, and behavioral knowledge, skills, attitudes, and abilities (KSAAs) that support performance.
- Second, certain affective attitudes must be obtained before skills that support effective performance in a cross-cultural domain can be developed. In other words, attitudes can hinder or facilitate the development of necessary skills.
- Third, our theoretical framework provides examples of performance at different levels of competence.
- Fourth, the development of cross-cultural competence is a function of experience. Thus, as one acquires more experience in cross-cultural domains, the KSAAs evolve. If that evolution is positive, subsequent experiences will become progressively more meaningful to the individual. However, experiences that are traumatic may create regressions in the 3C development process. In short, KSAAs mature interdependently and simultaneously. Thus, development and transitions across levels of the developmental model are not strictly linear.

The first characteristic in our developmental theory is empathy. Empathy has been defined as “feeling in oneself the feelings of others” (Strayer & Eisenberg, 1987, p. 391) and a general maturity specific to cross-cultural interactions. However, Bennett (1993) defines empathy not as feelings, but as the ability to experience some aspect of reality differently than one would typically experience it in one’s own culture. This definition is consistent with typical definitions of perspective taking, one of the cognitive KSAAs that comprise 3C.

According to Bennett's (1993) DMIS, the shift in the perception of reality can be made by progressing from the ethnocentric to the ethnorelative stages of development. Bennett notes that ethnocentrism is similar in definition to egocentrism, which is defined as an inability to conceive of oneself and one’s culture as anything other than the center of existence. We postulate that progression toward ethnorelativism can be trained by developing the KSAAs that compose cross-cultural competence and support effective performance.

Bennett’s DMIS is focused on the individual's experiences and comprehension of those experiences. It is therefore phenomenological in that it describes the individual’s experience of culture differences and the developmental progression marked by the individual's maturation. Maturity or development is defined as “the construction of reality as increasingly capable of

accommodating cultural difference...” (Bennett, 1993, p.24). In contrast, our theory of development focuses what supporting skills and abilities support performance. The individual’s construction of reality continues to be more finely tuned as competence grows. We are not focusing here on that process, but rather on what level of competence is supported by the lack of or presence of such maturity. We have defined several components of maturity beyond this general movement from ethnocentric to ethnorelative.

The Cognitive Stage Model (Ross et al., 2005; Ross et al., 2009) describes cognitive skill development via a progression of stages in any domain of practice. We adapted aspects of this model of cognitive development to support our model. While the Stage Model describes five levels of development, we felt that military audiences will respond best to a three-tiered structure of competence as is consistent with military training -beginner, intermediate and advanced (often referred to in training as crawl, walk, run). We added a fourth level to our model that precedes beginner to reflect our findings about Soldiers who are lacking in awareness. Such Soldiers may need to be identified to receive more 3C training or perhaps may need to be managed in terms of assignments and tasks to support mission success. Whereas the Stage Model (Ross et al., 2005; Ross et al., 2009) provides a framework of competence, it does not integrate affective components, except for a few instances. For example, the Advanced Beginner’s (Level 2) emerging motivation to seek expert knowledge and the Competent performer’s (Level 3) increased emotional involvement and feelings of ownership of plans and outcomes are mentioned.

Although the above-mentioned models provided insights into the structure, our model was primarily informed by empirical data. Specifically, we integrated domain specific cognitive, affective, and behavioral skill components into the descriptions of each level of the 3C model. The initial components were primarily informed by the General Framework of Cross-Cultural Competence (Abbe et al., 2007). We used these components to classify the KSAs that 3C is comprised of. With increasing competence marked by the development of the component KSAs, experiences will become more meaningful and therefore, subsequent performance will be more effective. For example, a high level of cognitive flexibility will allow a Soldier to overcome potential stumbling blocks in a cross-cultural interaction. These KSAs support performance on various tasks ranging from situation assessments to interactions with locals. Abbe et al. (2007) provide a rich source of variables that are defined and classified as predictors of effective intercultural performance. We have used our findings to describe predictors in depth and offer examples of performance at different levels of competence.

Expertise develops as a function of domain-relevant experience and practice. In the case of 3C, experience allows progression across the levels of competence. Interactions, observations, assessments, and actions taken within a specific culture can contribute to the development of general cross-cultural competence. Hoopes (1981 as cited in Bennett, 1993) states that the “critical element in the expansion of intercultural learning is not the fullness with which one knows each culture, but the degree to which the process of cross-cultural learning, communications and human relations has been mastered” (p. 23). We assert that a general competence can be identified and described.

Traditional approaches to learning identify training gaps and seek to close them, implying a linear progression to learning and performance. We recognize that experience contributes to the

development of relevant KSAs that may be non-linear. Klein and Baxter (2009) have theorized that as people build mental models that support performance in a real-world domain, the learning path is not linear. They suggested that a linear model is more appropriate to describe acquisition of declarative knowledge. Transformation (during movement within or between levels in a developmental model) often requires that the learner adjust his or her mental models when performance relies heavily on sensemaking and decision making. Therefore, assessment of learning must take into account that “unlearning” sometimes is required for the refinement of mental models. Though our proposed assessment system will not attempt to examine mental models, we recognize that a shift in understanding may temporarily cause a regression. Our empirical data has uncovered instances in which traumatic experiences can contribute to regressions in competence and influence performance. Traumatic experiences can impact affect and attitudes, despite the individual still possessing knowledge and skills that would indicate the ability to perform at a more competent level.

We extracted a number of potential constructs from the literature (see Abbe et al., 2007 for a comprehensive review of relevant constructs) in our initial phase of work. Much of the literature is based in domains other than the military such as businesses or the Peace Corps. Given that the goals and methods vary across domains, we realized that integration of empirical findings from a military domain is critical to understanding which constructs were relevant. We refined and integrated relevant constructs into our model through an iterative process discussed in our Findings section. The final set of constructs in our model is reported in the Findings section below. Specifically, the constructs were derived based on the integration of literature primarily in domains outside the military and empirical findings in the military domain.

In the following sections of the report, we describe our approach to creating a developmental model of 3C which included 1) refining an initial set of 29 KSAs comprising cross-cultural competence into a final set of five factors, 2) developing and conducting simulation interviews, and 3) developing a representation of a continuous stage model of development. We document the findings of the interviews and their contribution to the development of the stage model and provide two resulting model depictions—one showing the relationship among the factors that make up 3C, and a second describing the KSAs and examples of performance expected at each level of proficiency.

Method

To uncover the competencies that lead to effective performance across missions, the specific behaviors must be scalable in terms of each individual’s proficiency (Campbell, 1990). Therefore, we sought to identify competencies that are trainable and that could be empirically measured and validated. In addition, we also attempted to gain insight into constructs through critical incidents reports, task diagrams, and team ranking data. To access constructs that are difficult to capture, we constructed a semi-structured simulation interview. The simulation interviews elicited examples of potential performance at various levels of competence. They also provided additional insight into attitudes that are not always evident in highly structured survey methods.

This section describes the methods used to generate the supporting information for creating the Developmental Model of Cross-Cultural Competence. The steps included 1) refining the list of KSAs developed in the first phase of this effort into the smallest set of factors possible as a basis for the developmental and the assessment system, and 2) devising and conducting simulation interviews.

Refining the Knowledge, Skills, Attitudes, and Abilities

In the first phase of this effort, the research team developed a list of 29 KSAs that make up cross-cultural competence by examining research literature, analyzing critical incident interviews, and analyzing team ranking interviews. The 29 KSAs are shown in Table 1 (also see McCloskey et al., in publication). Fewer factors are desirable in order to succinctly describe each level and also to support development of an assessment system that provides comprehensive yet usable results in the next stages of our work. Several steps were taken to consolidate the number of constructs to be used in the model development. The senior researchers on the team reviewed the 29 KSAs for overlap and importance. As part of that review, the researchers compared the list of 29 KSAs to 40 cultural learning statements and their definitions that were derived by a Department of Defense working group of researchers and operators (McDonald, McGuire, Johnston, Selmeski, & Abbe, 2008). From this review, we consolidated and revised the list to a smaller set of 17 KSAs that we believed had less overlap, were relevant to the cross-cultural competence and useful for further research.

We reviewed the 17 KSAs using descriptors derived from findings of the team ranking interviews and extracted from critical incidents from the first phase of the effort (see McCloskey et al., in publication). We extracted more than 400 statements from the interviews that were representative of different KSAs and the corresponding performance examples. In the team ranking data, each statement was a phrase that an interview participant used to describe a fellow Soldier in terms of culturally-related knowledge, skills, attitudes, and abilities during a recent deployment. A few examples are shown below:

- Didn't really like what went on, but understood a lot of the situations (i.e., understood why a civilian would take a bribe from enemy to feed family)
- Displayed no desire to learn about their culture...could care less
- Understands and asks questions about other cultures

From the critical incident data, we extracted and documented instances in which the level of competence influenced mission success. For example a Military Transition Team member described an incident where his frustration resulted in a regrettable outburst toward a foreign counterpart. This outburst damaged the relationship and reduced the overall efficiency of the training process.

Two researchers sorted the statements and incidents to determine which KSAs overlapped with one another and could be combined based on rater agreement. Our goal was to develop a smaller, more concise set of KSAs to use in analyzing the simulation interviews.

Table 1

Original (29) KSAs Identified from the Literature and Interview Data during Phase 1

Cognitive	Affective (Attitudinal)	Behavioral
Perspective Taking	Willingness to engage	Self-presentation
Anticipate/Predict	Cultural openness	Relationship Building
Diagnose nature of resistance	Withhold on closure	Rapport Building
Self-awareness/Self-monitoring	Self/Emotional regulation	Manipulate/ Persuade
“Big picture” mentality	Dedication	Flexibility
Interpretation	Open-mindedness	Communication Skills
Observation	Patience	Leveraging own personality attributes
Frame Shifting	Emotional empathy	
Awareness of cultural differences	Emotional endurance	
Planning	Tolerance for ambiguity	
	Resilience	
	Self-efficacy	

We also developed a self-report measure to assess these KSAs and used preliminary findings to examine differences and commonalities across the KSAs. (At the time of this report, insufficient data are available to employ a factor analysis to group and select final constructs.) Using findings from the self-report measure and an analysis of the simulation interview data, we discussed the resulting descriptions for each level to gain insights into how to combine them into the smallest number of factors possible as a basis for describing levels of 3C development. The 17 KSAs analyzed and consolidated during model development are shown in Table 2.

Table 2

The Reduced (17) KSAs Reviewed for Inclusion in the Current Effort

Cognitive	Affective (Attitudinal)	Behavioral
Perspective Taking	Willingness to engage	Self-Presentation
Sensemaking	Openness	Self-Monitoring
Awareness of cultural differences	Uncertainty Tolerance	Relationship Building
Flexibility	Emotional Self-Regulation	Rapport Building
Big picture mentality	Dedication	Manipulate, Negotiate, Persuade, Influence
	Emotional Empathy	
	Self-Efficacy	

Simulation Interviews

We developed a simulation interview protocol that presented a realistic military scenario to simulate potential performance. Our objectives were to categorize the participants into competence levels based on their responses to interview questions. The simulation interviews allowed us to gather descriptions of the different levels, understand differences within levels, analyze which KSAs contributed to the responses, and provide examples of performance. To develop the interview, we used critical incidents collected earlier in the project, and constructed a paper-based vignette comprised of background information followed by six situational segments. Each of the six segments incorporated at least one challenge or decision point. We also developed a set of probes for each segment to gain insight into what KSAs the participant was using to form his/her responses. Further details on this interview method are described below.

Participants

The research team conducted 70 simulation interviews with Soldiers representing a wide range of ranks and MOS. The average age of the respondents was 32 years and the average number of deployments was 1.66. Table 3 provides demographics for the interview participants.

Interview Protocol

The simulation interview protocol included a description of a situation in a central African country, the Republic of Burundi, with several action segments taking place as the general situation unfolded. Each segment included a challenge requiring the participant to choose a potential course of action. Team members independently reviewed drafts of the protocol and provided feedback on flow and content. A series of interview probes was developed for administration at the end of each segment with the intent of eliciting detail on the critical cognitive, affective, and behavioral KSAs that may influence mission performance. To elicit information on cognitions, questions focused on cues attended to, perceptions of the overall situation, or the perspective of a local. To elicit affective responses, questions probed attitudes toward angry villagers or reactions to perceived deceptions or broken promises. Behavioral queries focused on actions taken in meetings, methods for building relationships, and descriptions of improper conduct. Although some of the queries were based on traditional Critical Decision Method (CDM) protocols (Hoffman, Crandall, & Shadbolt, 1998), most were developed specifically for this project.

In addition to the scripted probes to access underlying KSAs, standard follow-on probes were also used (e.g., "Can you tell me more about that?" "Is there anything else you can tell me?" etc.). The group discussed appropriate circumstances in which to use the probes to elicit further information.

Table 3
Simulation Interview Participant Demographics (N = 70)

	Count	%
Gender		
Males	59	84%
Females	11	16%
Race		
White	50	70%
Black	9	13%
Other	11	17%
Rank		
W2	1	1%
E3 - E4	2	3%
E5 - E9	49	70%
O1 - O2	4	6%
O3 - O5	13	19%
Military Occupational Specialty/ Area of Concentration		
31 B	20	29%
38A/B	10	14%
68W	4	6%
42A	3	4%
92A	3	4%
36A	3	4%
Other	27	39%

After the first set of simulation interviews was completed, the team met again and discussed the effectiveness of the situations and related probes. Although no probes were changed in subsequent interviews, the team made two modifications in an attempt to enhance the variety of feedback received. These modifications involved the addition of ambiguity to two situations in which the intent of local citizens is unclear. Rather than have the local citizens never in the wrong throughout the simulation, we added some questionable behaviors that, hopefully, would elicit stronger affective responses and create more challenging situations in general.

We provided the participant with background information on the Republic of Burundi. Burundi was chosen because of its current political and economic instability as well as its potential for future increased US presence in non-traditional military roles. Details on the current conflicts, living conditions, crime levels and government structure were provided. The final version of the six segments of the interview and the challenge embedded in each are as follows:

- Segment 1. The participant has been made leader of a small force that is being sent on a quick reaction task to a remote region of Burundi to work with local leaders to promote pro-US sentiment and increase regional stability. The participant has a very short period of time to prepare for the mission and to assess his/her team's readiness.

- Segment 2. Upon arriving at a remote airport in Burundi, the participant meets the interpreter and is informed about a rapidly approaching surprise meeting with local leaders. The participant must decide how to quickly prepare for the meeting and how to deal with the new interpreter.
- Segment 3. The participant has been tasked to visit a remote village where insurgents have been known to frequent, and where sentiment toward the US is unknown. While approaching the village, they learn that the last US force to visit got into an altercation with some locals and injured a teenager, and that the people may be less than friendly. The participant must determine a strategy for entering and subsequently visiting the village, including what to tell his/her Soldiers prior to entering.
- Segment 4. The participant has established a fragile, yet friendly relationship with the village elder over a few months. While patrolling the village, a reliable source suggests that a high-level insurgent is hiding in the house of a respected family. The elder approaches the participant and demands that the Soldiers not search the house, as it is surely empty, and it would make him and the village very upset.
- Segment 5. After being fired upon from inside the house, the US force conducts a search, finds the insurgent, and strikes a boy who had appeared to be pointing a weapon (which ended up being a stick) at the Soldiers. The elder approaches the participant, furious that a child has been struck. The participant must determine how to deal with the elder and the village, both in the short term and over the next several weeks.
- Segment 6. Late in the deployment, the US forces and local leaders jointly decide to configure a volunteer militia to protect six area villages. After spending significant time recruiting volunteer trainers and creating a train-the-trainer course, the volunteer trainers fail to show up repeatedly for their training with little or no excuse. The participant must determine next steps to ensure that the training is a success.

Procedure

The team of four researchers met several times to discuss any confusion in the protocol and to run through the entire scenario prior to its first administration. The simulation interview followed a scripted process, given that the researchers would conduct them at various locations. The interviews lasted between 45 minutes and 2 hours based on the extent of responses provided by interviewees. One researcher typically conducted the interview while a second interviewer recorded responses. The simulation interview sessions began with the interviewer handing out a laminated sheet containing the situational background information and supporting graphics (map and picture of indigenous citizens). The interviewer then read the information and the interviewee was prompted to follow along. After providing an opportunity for the interviewee to ask questions of clarification on general expectancies and the provided information, the interviewer then handed out a sheet describing the first situation (using both graphics and text). After reading the text aloud as the interviewee again followed along, the interviewer asked a series of scripted questions, employing standard follow-on probes when answers were

particularly brief or unclear, or if the respondent appeared to misunderstand the question. This process was repeated for each of the six segments, and then the interviewee was given an opportunity to provide feedback on the overall interview process and content.

Upon returning from each data collection, the individual researchers reviewed their notes, correcting typos and filling in noted gaps by consulting the audio recordings and comparing them to the written notes at the specified points prior to data analysis.

Results

Review of the 3C Knowledge, Skills and Abilities/Attitudes

Prior to the simulation interview data collection, two members of the research team independently sorted the 400 statements derived from the team member ranking task data into the 17 KSAs. The joint probability of agreement between the two raters was as low as approximately 50%, suggesting possible overlap between the KSAs.

The results of the sort are shown in Figure 1. The green bars represent the number of items that the raters agreed upon within each category. The total number of items placed in a category by Rater 1 and Rater 2 are represented by yellow and blue bars, respectively.

A few patterns emerged as a result of the sort. One rater consistently placed items in the Self-Presentation category that the other rater placed in the Self-Monitoring category. This is not surprising considering the definitions of these items are similar and as follows: Self-Monitoring - the ability to see yourself as others see you and to recognize subtle changes in your own personal affect and adjust outward behaviors accordingly; Self Presentation - The ability to consciously modify overt behaviors and appearance in response to changing demands of the cross-cultural interaction. As a result of the sorting task, the research team merged these items into a single category, called Self-Monitoring, reducing the number of categories to 16.

Additionally, there seemed to be overlap among Relationship Building, Rapport Building, and Manipulate/Negotiate/Persuade/Influence. There was also overlap between Sensemaking and Integrate. Finally, previous research has suggested an overlap between Openness and Flexibility.

We decided to keep these constructs separate for the next stage of analysis to examine if simulation interview data would support merging them. The constructs shown in Table 2 (excluding Self-Presentation), were used to guide the simulation interview analysis.

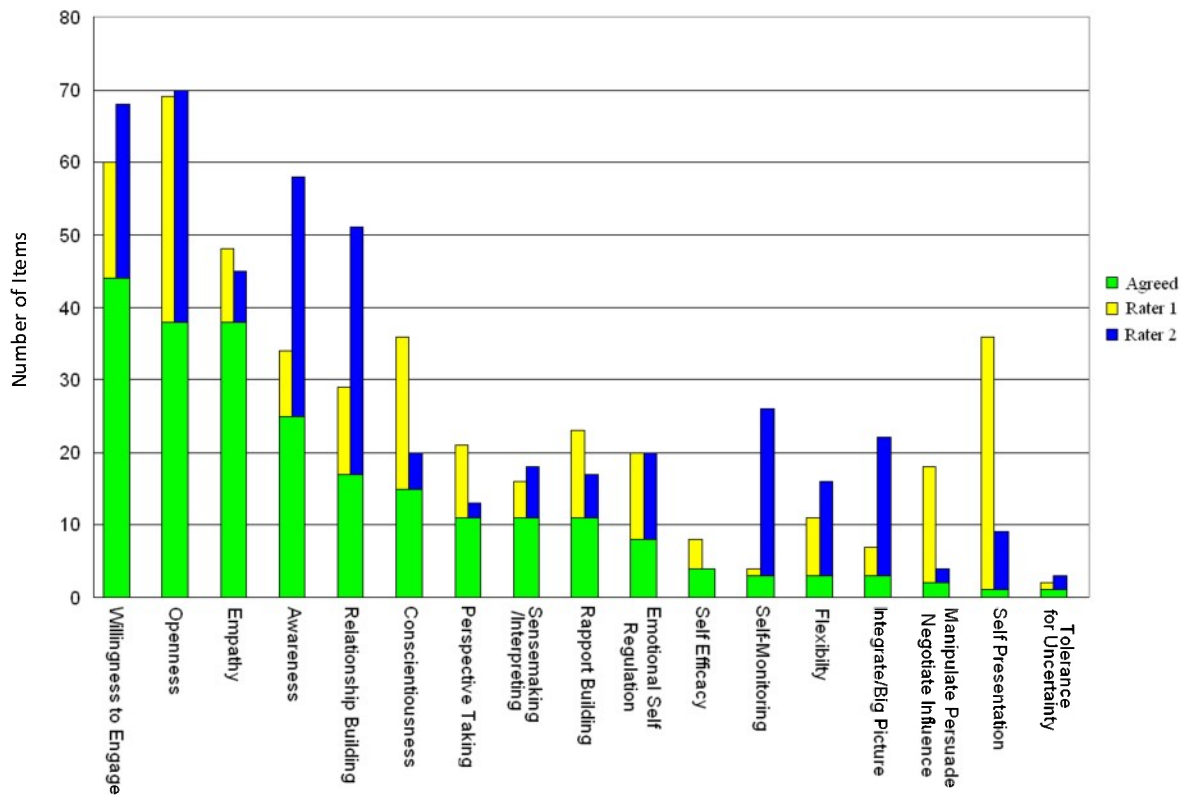


Figure 1. Results of Sorting Performance Descriptors by 17 KSAs.

Description of Constructs and Performance Examples Using Simulation Interviews

Analysis

Simulation interview data were analyzed to obtain detailed descriptions of constructs and corresponding examples of potential performance at different competences levels. The first step in the analyses was to assign a rating of competence at levels 1- 4, to each participant. The criteria for assigning a participant to a particular level were based on descriptors developed by the principal investigator (PI). The PI first constructed descriptions of each level from the team ranking data, separating clusters of performance examples into four competence levels proposed in the Phase 1 effort (McCloskey et al., in publication). Nearly all of the 68 Soldiers who completed the team ranking interview had grouped their teammates into three to five distinct clusters of competence, facilitating the process of assigning descriptors to levels.

Once the team ranking data were sorted into the four levels, the PI reviewed a subset of the critical incidents collected in Phase 1 and sorted with the team ranking data into like items to develop descriptors of each competence level. These descriptions were then compared with the descriptions from the Cognitive Stage Model (Ross et al., 2005) and the hypothesized 3C Levels 1 – 4 (referred to as Pre-Competent, Beginner, Intermediate and Advanced) to describe performance at each of the levels of development. A protocol was then developed for review and rating of the simulation interview data set. The team reviewed the protocol and initial

competence level descriptions and discussed any confusion and disagreements. All initial rating disagreements had been resolved resulting in a final rating protocol. The five team members then met and discussed the 16 KSAs and initial impressions of the overall simulation interview data.

Next, each of the five team members independently evaluated a single interview using the previously developed template and protocol. First, a rating of the participant (Level 1- 4) was assigned by each researcher based on the protocol. Following the global rating, each researcher identified excerpts from the interview notes that demonstrated either the **presence** or **absence** of one of the KSAs and labeled it with the KSA name. For example, within one segment of the simulation interview, participants were asked how they would deal with a village elder who had apparently deceived them, yet was expressing anger over a recent raid. A response excerpt that was rated as demonstrating an absence of the Relationship Building KSA was “He has intel we don’t and vice-versa, so in the future he will either help me or get the ---- out of the way. If he accepts all that, it’s a good day. If he rejects that, I’ll say sorry, but we’ll continue doing what we’re doing.” Conversely, an excerpt (same situation, different participant) that was rated as demonstrating the presence of the Relationship Building KSA was “I would say to the elder that we will have our medic look at the boy and make sure he is not seriously injured and provide whatever care we can depending on injuries and (make) apologies for the uncertainty that came up from our situation.”

Each segment and probe from the interview was treated as an item for analysis. A portion of one rater’s scoring of a single interview using the template is presented in Table 4 below. The first column is the participant number; the second is the question number; the third is the KSA referenced; the fourth indicates whether the excerpt suggests the particular KSA was present or absent; and, the fifth column includes excerpts and any explanatory information which also served as a rationale for the rating. A complete example interview rating is provided in Appendix A.

Table 4

Simulation Interview Rating Example

ID	Item	KSAA	Presence or Absence of KSAA	Supporting Data
40	1.4	Self Efficacy	Present	Very prepared. After this past 15 month deployment, I was PRT leader. I could make it work with 24 Soldiers.
40	1.4	Empathy	Present	If we have funds and ability, it is unlimited how much we can do/help.
40	1.5	Cultural Awareness	Present	Who is majority religion in my area, is it a good area/bad area, do your homework. Gather as much info as you can. Culture in area.
40	1.6	Perspective Taking	Present	It's a given, you will have young Soldiers, never left home before basic training. Sit them down, get inside their heads...After a while, Soldiers will get restless, homesick, Soldiers die. Make them look at big picture.

Following the initial rating of the same interview by each of the five researchers, the team met again and discussed rating protocols and discrepancies. From this discussion, the team further standardized the evaluation protocol, ensuring that all raters used the model descriptors, the individual KSAA descriptions, and rating guide documentation developed by the PI to help frame identification of individual KSAs and provide all team members with a common frame of reference. Using this standardized reference set, four raters then proceeded to rate the interviews. Every interview was independently scored by two members of the research team. Each participant was assigned an overall rating of cross-cultural competence.

Competence Level Ratings

Of the 56 initial interviews, the independent raters initially were in agreement on competence rating 29 times (52%). Of the remaining 27 interviews, 25 (93%) of them differed by a single number (most often, one rated the participant a 3, and the other a 2). These differences were resolved to 98% agreement through a detailed examination and resolution of the disagreements. The process was conducted by a sub-team of three raters, where each of the raters independently reviewed the interviews and developed rationales for the ratings. After this was done for each interview, the three raters reconvened and disclosed their overall ratings. When one rater disagreed with the other two, that rater first stated his or her basis for the rating. The other raters then stated their reactions to the argument and, if not convinced, also provided their rationales for the alternate rating. At this point, the actual interview and initial ratings (of the two initial raters) were projected on a screen so that all three raters could simultaneously view the data. Specifically, the relevant portions of the interview transcript were displayed, and if debate continued, the raw audio was consulted. The debate continued until all three raters reached

consensus on a single rating. On the one occasion out of the 27 interviews in which consensus could not be reached after a reasonable amount of time, the majority ruled.

Once an additional 15 interviews were available for a total of 71, the team rated each of those using two raters who achieved 87% agreement. A team of three raters met to discuss the two ratings that were not in agreement and discussed them until agreement was reached.

Two participants (3%) were rated at Level 1, Pre-Competent, which was evidenced by responses that highlighted resistance to cultural interactions or complete lack of knowledge of cultural concepts. 29 of the 71 participants (41%) were rated at Level 2, Beginner. This may be the most common 3C level within the Army, as it encompasses both novices with only surface level understanding and those possessing basic skills. 29 of the 71 participants (41%) were rated at Level 3, Intermediate. Many Soldiers with multiple deployments fall into this category, but one Soldier without deployment experience, but with strong interpersonal skills, positive cultural awareness, and positive intercultural experience outside the military, was also rated Level 3. 11 Soldiers (15%) were rated at Level 4, Advanced.

Analysis of KSAs

The simulation interview coding resulted in the identification of various levels of the presence of each of the 16 KSAs at each of the four hypothesized levels of competence (N = 71). Table 5 summarizes the codification of the presence of KSAs by competence level. The percentages represent the relative frequency of interview excerpts that demonstrated the presence of a particular KSA to the overall KSA instances. For example, 46% of the Self Efficacy interview excerpts for the 29 participants who were rated as beginners demonstrated a presence of Self Efficacy (versus an absence of Self Efficacy). In the table, each of the 16 KSAs is labeled as cognitive, affective or behavioral.

Table 5
Summary of KSAA findings in the Simulation Interviews

KSAA		Pre-Competent (N = 2)	Beginner (N = 29)	Intermediate (N = 29)	Advanced (N = 11)
Willingness to Engage	A	0%	95%	96%	98%
Dedication	A	80%	92%	100%	100%
Self Efficacy	A	67%	47%	66%	53%
Empathy	A	0%	46%	84%	88%
Emotional Self-Regulation	A	100%	85%	98%	96%
Cultural Maturity Total		48%	74%	89%	92%
Cognitive Flexibility	C	33%	59%	80%	89%
Uncertainty Tolerance	A	33%	33%	47%	94%
Openness	A	20%	53%	93%	100%
Cognitive Flexibility Total		29%	51%	79%	95%
Cultural Awareness	C	25%	63%	79%	89%
Cultural Knowledge Total		25%	63%	79%	89%
Perspective Taking	C	45%	53%	88%	98%
Integration/Big Picture	C	56%	74%	92%	99%
Sensemaking	C	56%	87%	96%	100%
Cultural Acuity Total		52%	71%	92%	99%
Self Monitoring	B	67%	94%	99%	100%
Relationship Building	B	45%	50%	87%	100%
Rapport Building	B	0%	58%	95%	100%
Manipulation/Persuasion	B	100%	98%	99%	100%
Interpersonal Skills Total		76%	74%	94%	100%

C = Cognitive A= Affective B = Behavioral

Although based on a limited number of participants (especially participants falling into Level 1), the simulation interview data gathered to date still yield some interesting results. When examining individual KSAAAs, the data suggest an increase of every cognitive KSAA across all four developmental levels. Cognitive Flexibility, Perspective Taking, Sensemaking, Awareness and Big Picture/Integration had increasing present versus absent responses across the four levels. The Cultural Awareness findings suggest a substantial increase in awareness between Level 1 and Level 2 Soldiers, often noted in the data as a Soldier appreciating and understanding the importance of cultural differences in mission success. The data also suggest that Cultural Awareness continues to increase in Level 3 and Level 4. Data from Level 2 to Level 3 provide instances where cultural information is being utilized to support assessments, actions, and an awareness of cultural biases.

In the Affective KSAAAs, as a Soldier advances to Level 4, Uncertainty Tolerance increased considerably, as noted by increasing percentages of present Uncertainty Tolerance responses. Ability to manage uncertainty is typical of experts in other domains. Soldiers in Levels 2-4 are high in present instances of Willingness to Engage, Dedication, and Emotional

Self-Regulation. The percentage of present instances of Openness increases across each level of competence. Self-Efficacy appears to improve as a Soldier advances up to Level 3. But at Level 4, Self-Efficacy decreases. Two possible explanations come to mind. First, the Level 4 Advanced Soldier may be performing much more complicated and challenging tasks; second, he/she may just be more aware of the inherent complexity that cultural considerations add to mission tasks, and thus, may have a more accurate sense of the hazards and potential errors involved.

Behavioral components such as Relationship and Rapport Building improve across all levels. Self-monitoring appears to be high across Levels 2-4. Manipulation and Persuasion are attempted in a positive manner by individuals across Levels 1-4. This finding indicates that even Level 1 Soldiers may know how to properly attempt this skill (at least in the simulation interview) even if he/she is reluctant to do so during operations, as indicated in the team ranking interviews.

As the data revealed only two Soldiers at the pre-competent level, Level 1 is difficult to describe strictly based on the simulation interview. A Level 2 Soldier (the Beginner who is ready to develop cross-cultural abilities) generally appears to be willing to engage with foreign locals. Although they may be inaccurate in their Perspective Taking and limited in their Openness during interactions, they are not actively avoiding encounters to engage with local populations. The Level 2 Soldiers provided a relatively even number of KSAA present and absent instances in terms of these interpersonal abilities, suggesting that the Beginner may often apply basic Interpersonal Skills that would have some effectiveness regardless of the cultural environment. However, the ratio of present to absent responses increases greatly at both Levels 3 and 4, as Soldiers may be applying their improved Cultural Acuity to sharpen their Interpersonal Skills. While the Level 2 and Level 3 Soldiers do not have empathy as high as the Level 4 Soldier, some emotional empathy is present, and it appears to develop to allow the Soldier to progress across all levels. The differences between Level 3 to Level 4 were marked by varying abilities to recognize the presence and consequences of one's own cultural biases.

The KSAA findings also suggested that the interview protocol may have provided significantly more opportunities for the participant to demonstrate Manipulation and Persuasion, Big Picture thinking, and Willingness to Engage than other KSAs.

Ratings Database

The simulation interview rating process described above resulted in raters identifying over 3,700 instances of KSAs across 71 interviews. These items were entered into a database that facilitates data searching, sorting, and analysis. It provides an easily accessible organization of the KSAs and overall level ratings. The following list of potential queries demonstrates the possibilities the database provides.

- 1) *Show all ratings for a specific question, organized by a participant's overall rating.* This query will allow us to examine how people answered a specific question at different levels. For example, we can quickly aggregate how our level 2 people answered a specific question compared to level 3, and see what types of KSAs were associated with level 2 answers as compared to level 3 answers.

- 2) For a specific KSAA, show all ratings organized by level. This query will allow us to examine how a specific KSAA can be described at level 1 compared to level 2, etc.
- 3) *Show a count of KSAs organized by the participant's overall score.* This would allow us to examine the differences in the number and type of KSAs displayed by participants at different levels of competence.
- 4) Show a list of KSAs organized by question. This would allow us to determine if a particular question tends to elicit evidence of a specific KSAA. This could be used to develop additional measures (such as Situation Judgment Tests or SJTs) that target a specific KSAA.

This database provides a way to examine the relationships between KSAs, the differences between competence levels, and the relationships between KSAs and competence levels. It also has implications for future research directions, especially if more data are collected across wider ranges of rank, MOS, and Service.

Final Cross-Cultural Competence Components and Levels

Once we identified 16 KSAs as the basis for our analysis, we continued to examine ways in which to consolidate them for a more parsimonious model. We developed a self-report measure to assess each KSAA which proved useful for examining ways to consolidate them. In order to develop items for this measure, we examined items that sorters agreed upon from the team ranking interview, existing items in the literature, and raw data from the critical incident interviews. Each KSAA (and a social desirability scale) was measured with eight items (four general items and four deployment-oriented items) for a total of 136 items. The questions prompted participants to report on current behaviors and preferences (general items), as well as on hypothetical or future situations (deployment-oriented items). Both formats were used to explore the potential benefits of imposing a deployment context to the survey items. We do recognize, however, that some participants may not have had cross-cultural experience at the time the surveys were administered, making the deployment-oriented items more difficult to answer with accuracy. The Willingness to Engage Scale is shown below in Table 6 as an example. Questions 1-4 are deployment-oriented and 5-8 are general.

Table 6
Example Scale from the Self-Report Measure

Willingness to Engage
Prior to a deployment, I would try to learn the basics of the language before going, whether directed to or not.
During deployments, I would seek out opportunities to experience the local culture.
If deployed, I would enjoy opportunities to interact with the people of that country and learn about their lives.
If deployed, I would avoid eating and socializing with the locals.
In general, I try to limit my interactions with strangers.
I enjoy meeting people who are different from me.
When I am meeting new people, I am willing to try new activities I wouldn't otherwise try.
I tend to get very engaged when part of a group discussion.

The self-report measure has been administered to 43 Soldiers to date. Though this is not yet a large enough sample to conduct a factor analysis, it did allow us to begin to examine the relationships between the constructs. Additionally, the relationships that we proposed after examining the team ranking interview data such as combining Relationship Building, Rapport Building, and Manipulate/Persuade/Negotiate/Influence, Sensemaking and Big Picture/Integration, and Openness and Flexibility were supported by the initial self-report data. In addition, rating the simulation interviews also supported how closely related some KSAs appear to be. These insights allowed us to group the KSAs into six factors of Cultural Maturity, Empathy, Cognitive Flexibility, Cultural Knowledge, Cultural Acuity, and Interpersonal Skills. The KSAs Empathy and Awareness remained as independent factors, whereas other KSAs were grouped based on overlapping perceived impact on 3C development. After further discussions with operators and researchers, we integrated Empathy into Cultural Maturity resulting in five final factors on which we built the developmental model. These components are described in Table 7, along with the KSAs that were integrated into each factor.

Table 7
Five Components of Cross-Cultural Competence

Factor	Description	KSAs Subsumed by Factor
Cultural Maturity	The ability to remain confident calm and dedicated in cross-cultural settings, and to further seek interactions to promote mission success	Emotional Self-Regulation Self-Efficacy Dedication Willingness to Engage Emotional Empathy
Cognitive Flexibility	The ability to withhold judgment in the face of limited information, remain open to alternative explanations and easily adjust perceptions based on new information	Flexibility Uncertainty Tolerance Openness
Cultural Knowledge	The knowledge that cultural differences are deeper than customs, with an awareness of how they influence one's own behaviors and perceptions and those of others	Awareness
Cultural Acuity	The ability to form accurate cross-cultural understandings and assessments of: situational dynamics, the perspectives of others, and the impact of cultural actions on the broader	Perspective Taking Sensemaking Big Picture Mentality
Interpersonal Skills	The ability to consistently present oneself in a manner that promotes positive short- and long-term relationships in order to achieve mission objectives	Self-Monitoring Rapport Building Relationship Building Manipulation/Persuasion

In the following sections, we provide detailed descriptions of each of the four developmental levels along with supporting data and examples to further illustrate the characteristics within each level.

Developmental Level 1 – Pre-Competent

As a result of our analysis in the first phase of this effort we incorporated a level, Pre-Competent, that precedes the novice/beginner level that is typically the lowest developmental level in traditional models. In the cognitive stage model that we reviewed, the first stage, Novice, is not without some orientation to the skill area. The novice has some knowledge of objective facts of the domain in the abstract through education and training. A novice has no field experience. Performance is guided by rules and the novice will not be able to adapt to situations that deviate from the rules.

In introducing the Pre-Competent level to our model, our goal is to acknowledge that this particular area of competence may require an examination of individuals who are not ready to develop 3C even if the organization needs them to do so. It is possible that Soldiers at the Pre-Competent Level are not aware of cross-cultural issues or question the value of learning and applying them. Most areas of professional competence involve self-selection, which drives motivation for skill development and creates an amenability to attitude changes and new experiences. General-purpose forces may not self-select for cross-cultural competence, as they have volunteered to become Warriors, leaders, or technicians, but not ambassadors of US policy. Although likely very small in number, it is important to identify the Soldiers who are not motivated and/or not aware of the need to develop 3C capabilities to support the range of military missions. The purpose of understanding this level of Soldier is to determine how to

bring them to a point where they can benefit from training and/or to support selection and placement decisions.

The Pre-Competent Level is evidenced by lack of competence in most, if not all of the five factors. While those at the Pre-Competent level may have some general interpersonal skills, their low Cultural Maturity and Cultural Knowledge prevent them from consistently and effectively applying any behaviors to cross-cultural encounters. Being at the Pre-Competent Level is not strictly a function of lack of experience in the field. These Soldiers may have never been deployed or may have been deployed one or more times. An ethnocentric worldview, specifically at the stages of Denial or Defense, impedes motivation for the acquisition of knowledge and skills and directly interferes with the development of Cultural Knowledge. Table 8 presents a summary description of the Level 1 Soldier. Following the table, we provide some performance examples of this level selected from our empirical data.

Table 8
Overview of Level 1: Pre-Competent

Pre-Competent Soldiers lack Cultural Knowledge and rely on simplistic, inaccurate stereotypes. They are not open to new cultures, and they have strong in-group biases. They do not seek out interactions with members of other cultures. When interactions are necessary, they may be directive and openly negative. Pre-competent Soldiers may not benefit from training until their barriers to Cultural Maturity, Cultural Knowledge, and Cognitive Flexibility are overcome.		
Factor	Description	Example Statements from Interviews
Cultural Maturity	Shows frustration and responds with anger or blame	"crushing" the elder if he gets in his way, and demanding that the elder either "help him or get...out of the way"; "One that's hot-headed and trigger happy."
	Does not go beyond following orders	"One that just doesn't care, just doing what he has to do because he is told to do it."
Cognitive Flexibility	Closed to considering alternative courses of action	"...that it's your way and only your way."
	Depends on a concrete picture of situation	"I'd be upset that I was given such short notice when I didn't have information on these target people."
Cultural Knowledge	Shows lack of understanding how culture influences people's attitudes and behaviors	"On our end, it's always a give give give thing. On their end, it's: I need this."
Cultural Acuity	Shows inability to see situation from others' perspectives	"Let ones who showed up know that, collectively, they all failed."
	Does not see how actions affect broader mission	"If it moves and you don't like it, shoot it."; "Better to ask forgiveness than to ask permission."
Interpersonal Skills	Shows lack of ability to adjust behavior in a socially appropriate way depending on situational cues	"(I will sit the way I want to in the meeting). That's how I sit. That's part of my culture, so we have to do some give and take. "
	Lacks ability to rapidly and effectively develop rapport with locals	"Introduce (the interpreter) to leadership in team and make sure he knows I'm in charge and what I say goes."

The following descriptors of cross-cultural performance at the Pre-Competent Level are based on team ranking and critical incident data, as well as KSAA analysis and examples from the simulation interview data. The following description provides a snapshot of Level 1 organized by factor.

Cultural Maturity. This factor is comprised of five KSAA: Emotional Self-Regulation, Self-Efficacy, Dedication, Willingness to Engage, and Emotional Empathy. Simulation interview data revealed 48% present KSAA of the total Cultural Maturity KSAA instances. In other words, of all the interview excerpts from Level 1 participants that coders linked to Cultural Maturity, 48% of those instances demonstrated a presence of Cultural Maturity versus an absence of it. Please refer to Table 5 for percentages of instances organized by individual KSAA. Soldiers at Level 1 lack empathy due to in-group bias and ethnocentric perspectives of Denial or Defense. Due to the presence of Denial and Defense, they are not willing to engage with locals because they do not see the impact of self-regulation, taking more time, and making multiple attempts, on the mission goals. They have no Self-Efficacy regarding development of cultural interaction skills, because they are unmotivated to improve themselves as they do not see the tactical advantage. Although, this level of Soldier appeared to be in the minority in our sample, they must be recognized and examined as they do exist, take part in all activities, and may take actions (or inactions) that are counterproductive to mission success.

Soldiers at the ethnocentric stages of Defense are not concerned about Emotional Self-Regulation as a means of managing interactions and situations. They show their frustration in cross-cultural interactions when things are not done based on their expectations. They may respond with anger and blame toward local nationals for not helping them, for impeding the mission, or for creating an undesirable situation. For example one Soldier in the simulation interview spoke of “crushing” the elder if he gets in his way and demanding that the elder either “help him or get...out of the way,” as a potential course of action.

Level 1 Soldiers are typically very unwilling to engage with people from other cultures. Descriptions from team ranking interviews indicate that they “avoid contact with locals as much as possible,” and “never interact with...civilians/employees outside of work.” They most often “refuse food and countless opportunities to engage [which results in] damaged relationships.” One Level 1 Soldier demonstrated this attitude in his decision in the simulation interview for Segment 5. He decided to avoid a village for the entire next week following an unpleasant event. After that, when he patrolled, he said he would keep his Soldiers inside the vehicles, limiting interactions whenever possible and avoiding any opportunities to repay the damage that was done to the relationship. He generally chose to keep a distance from locals throughout the scenario, whether the local be the interpreter, a village elder, an injured child, or citizens.

Emotional Empathy is generally absent from this level. For example, when referring to an incident from the simulation interview (Segment 3) in which a local civilian was accidentally shot by other Soldiers, the participant claimed, “He was throwing rocks; he was going to get shot. I don’t really care.” Abbe et al. (2007) note that empathy is often cited as important for intercultural competence, but has not been empirically linked to outcomes. This construct is

different from Perspective Taking (cognitive empathy; see Abbe et al., 2007, p. 16) which we include under Cultural Acuity. There are a number of instances in our data where competent participants have brought up the concept of empathy and used its absence to describe (in part) very low competence. Therefore, we include absence of empathy as indicative of Pre-Competence.

Cognitive Flexibility. The three KSAs comprising this factor are Flexibility, Openness, and Uncertainty Tolerance. Simulation interview data revealed 29% present KSAs of the total Cognitive Flexibility KSA instances. At this Level, Soldiers are not open to learning about other cultures. They “judge (locals) for their beliefs and cultural differences” resulting in them “speaking poorly of the country, its people, and its customs/traditions.” As a result, they are inflexible in their approaches to problems. They are not able to adjust to cultural cues in the situation to achieve success. They do not tolerate uncertainty in a situation. If they have a plan of action in mind or an opinion formed, they will not waver, even when presented with new, conflicting information.

Cultural Knowledge. This factor is based on Awareness of the differences among cultures and how these differences affect one’s own behaviors and the behaviors of others. Simulation interview data revealed 25% present KSAs of the total Cultural Knowledge KSA instances. Level 1 Soldiers have virtually no understanding of cultural differences. In addition, these Soldiers are biased by their own cultures. This level of the model is characterized by a belief that one’s own culture (or set of beliefs) is the only right way. Thus, egocentrism and the lack of interest in other cultures may block the development of self-awareness and, in turn, awareness of other cultures beyond a surface-level understanding of typical customs. One person rated as the lowest level in the team ranking interviews was described as having “no regard for customs and courtesies outside of their own culture” based on his responses.

Cultural Acuity. This factor is comprised of Perspective Taking, Sensemaking, and Big Picture Mentality. Simulation interview data revealed 52% present KSAs of the total Cultural Acuity KSA instances. Please refer to Table 5 for percentages of instances organized by individual KSAs. As noted above, Soldiers at this level are unaware of the role of culture in the context of the mission. Without knowledge of other cultures, judgment based on stereotypes, self-awareness, and understanding of others’ emotions, Soldiers at this level have not begun to develop Cultural Acuity. It is possible that they may sometimes make accurate predictions about the behavior of locals, because their stereotypes are based on generalities. They may also rationalize events to fit their own world view and reinforce their perceptions.

Interpersonal Skills. Interpersonal skills are a predictor of intercultural performance effectiveness. It is a broad category that includes the ability to initiate a conversation and to establish and maintain relationships. Interpersonal skills could include such things as Emotional Self-Regulation or Willingness to Engage, or even our Cultural Awareness Factor. Given our general categorization of KSAs into cognitive, affective, and behavioral, we have limited this factor to Self-Monitoring, Rapport Building, Relationship Building, and Manipulation/Persuasion. Simulation interview data revealed 76% present KSAs of the total

Interpersonal Skills KSAA instances. Please refer to Table 5 for percentages of instances as organized by individual KSAAAs.

Level 1 Soldiers do not have the Cultural Maturity and Awareness to support Interpersonal Skills. When Level 1 Soldiers are required to interact and superiors are nearby, they may be “...purely directive and even then, it will be strained. They didn’t want to be there and (locals) could tell,” according to one team ranking interview. Given that Soldiers in the Defense stage of ethnocentrism firmly believe their views are correct and are easily frustrated, these Level 1 Soldiers do not strive to monitor or control their presentation during interactions. As noted in the team ranking interviews, they are “unable to screen their own dialogue” and are “unaware of how they come across.”

Developmental Level 2 – Beginner

Level 2, Beginner, encompasses both pure novices and those Soldiers who have undergone some initial development (akin to Novice and Advanced Beginner Levels in the Stage Model). The pure novice has some orientation to the skill area, having some knowledge of the domain in the abstract through education and training. A novice has no field experience. Performance is guided by rules and it is limited, inflexible, awkward, and variable. They focus on isolated variables and are easily overwhelmed as they have no strategy for a situation. In general, novices assess themselves by how well they follow the rules.

Level 2 Soldiers who have undergone initial development have some domain experience and more general knowledge than a pure novice (more sophisticated context-free rules and facts). Their performance may be marginally acceptable. They can interpret situational elements they have seen in meaningful settings on a recurring basis. They seek guidance on task performance from sources as opposed to just consulting the rules. They have personalized their own set of guidelines for action; however, they cannot prioritize the meaning of different elements in many situations, as they have only a rudimentary ability to perceive patterns. Therefore, performance is “brittle”—easily broken or disrupted, since they are not adaptable to situations that deviate from expectation. They lack a sense of ownership and involvement and look to others to resolve problems (Ross et al., 2005).

Cross-cultural competence at Level 2 is characterized in the following ways. Soldiers we grouped in Level 2 in the team ranking interview data, demonstrated varying degrees of sensitivity and compassion, but none displayed a total absence of empathy. No descriptions of negative feelings toward foreign populations were found in the data for Soldiers at this level. Many Soldiers we grouped as Level 2 in the team ranking data “could feel the pain of [foreign citizens] and shed tears with them/for them,” and “have compassion for what was going on.” These attitudes seem consistent with Bennett’s (1993) third and final ethnocentrism stage, Minimization. “The strength of this position is in its ability to counter the threat reaction to difference...” (p. 41). Bennett notes that people at this stage manifest an orientation toward human sensitivity. The reason this more accepting stage is deemed as ethnocentric is that cultural differences are still not recognized as truly important and as motivating very different ways of

seeing the world. Instead, a person at this stage stresses the universality of all humans (we are all basically the same). Though willing to engage, they tend to over-rely on standard protocols, and are typically slow in adjusting to the changing demands of the cultural environment. Table 9 provides a description of the Level 2 Soldier.

Table 9
Overview of Level 2: Beginner

Beginner Soldiers show variability in empathy levels toward foreign nationals; ranging from lack of sensitivity to some compassion. These Soldiers are dedicated and are willing to engage, but they display lack of confidence about their abilities. Their understanding of cultures is superficial. Their ability to take the perspective of others is limited to imagining how they would feel in a specific situation without regard to cultural differences.		
Factor	Description	Example Statements from Interviews
Cultural Maturity	Shows low confidence in interacting with locals and effectively dealing with unfamiliar cultures	"Someone who is not as confident with his abilities, who will second guess himself..."
	Show basic/minimal sensitivity toward wellbeing of locals	"...have to be semi-sympathetic to them and have a good understanding of the culture so he doesn't offend anyone."
Cognitive Flexibility	Shows discomfort of (in) unexpected situations	"I would be feeling a little nervous...not knowing ... how they will receive you coming into their country."
	Minimally interested in other cultures and is often quick to judge differences in other cultures and customs	"Wouldn't trust elder, but wouldn't trust from the beginning that much anyway. They see foreigners and they lie to us a lot. "
Cultural Knowledge	Shows lack of understanding of why locals require different treatment than Americans and only minimally aware of how culture influences people's attitudes and behaviors	"Not preparing. Doing culturally wrong things, asking wrong questions. E.g., don't ask police chief about kids/women. Being culturally aware."
Cultural Acuity	Shows limited ability to see situation from others' perspectives	"They need to understand that it needed to be done."
	Shows limited ability to perceive an entire situation as related to the broader mission	"Try to figure out why they are having the civil war. What are some of the problems? Where we can start?"
Interpersonal Skills	Shows limited ability to adjust behavior in socially appropriate ways	"...so don't look like GI Joe, like we're taking over the village."
	Shows limited ability to rapidly and effectively develop rapport with locals	"...establishing rapport – chit chat, we're not bad guys or anything like that – show them a different side than what happened when the kid was shot."

The following descriptors of cross-cultural performance at the Beginner Level are based on team ranking and critical incident data, as well as KSAA analysis and examples from the simulation interview data. The descriptors are organized by factor.

Cultural Maturity. This factor is comprised of five KSAs: Emotional Self-Regulation, Self-Efficacy, Dedication, Willingness to Engage, and Empathy. Simulation interview data revealed 74% present KSAs of the total Cultural Maturity KSAA instances (see Table 5 for KSAA percentage breakdowns). Evidence of varying degrees of Emotional Empathy in Level 2 Soldiers in the simulation interview data can be found in their reactions to a boy getting injured by a Soldier during a raid in the simulation (Segment 5). Soldiers with apparently lower levels of empathy either took a “that’s too bad but that’s what he gets” attitude toward the boy, or they never mentioned the boy or his family. Other Level 2 Soldiers explicitly mentioned how inappropriate it is to strike a child, and they described how it would be a very upsetting situation for them. Their focus was on genuine apologies to the family and treating the boy’s injuries immediately.

Level 2 simulation interview KSAA data showed a high ratio of positive instances of Self-Regulation (though not as high as Levels 3 and 4), Dedication, and Willingness to Engage. In the data from the team ranking interviews, Level 2 Soldiers could be counted on to control their emotions when everything goes according to plan, but stressful encounters quickly put them “out of their league.” Perhaps the most accurate description of a Level 2 Soldier from the team ranking data is one who “had willingness to engage but was easily frustrated.” This finding is consistent with the cognitive stage model.

Cognitive Flexibility. The three KSAs comprising this factor are Flexibility, Openness and Uncertainty Tolerance. Simulation interview data revealed 51% present KSAs of the total Cognitive Flexibility KSAA instances. According to the team ranking data, when faced with unexpected situations or events in a cross-cultural environment, the Level 2 Soldier tends to be uncomfortable. He/she will “fall back on traditional Soldiering as primary solution when dealing with uncertainty,” and is quickly “out of their league” in “busy” encounters. In the simulation interviews, absent instances of Uncertainty Tolerance often took the form of expressed discomfort or unwillingness to take advantage of what other Soldiers viewed as a good opportunity to meet with local leaders (Segment 2). Many would postpone the meeting until they could get clear and detailed intelligence regarding the participants at the meeting, whereas nearly all higher-rated Soldiers recognized the importance of making this first meeting as scheduled, and felt comfortable attending, even with limited available information. Many of the same Level 2 Soldiers also refused to even consider searching a house that may have harbored a top insurgent, not because of upsetting the populace, but more because they did not feel comfortable without complete information (Segment 4).

Cultural Knowledge. This factor is based on Awareness of the differences among cultures and how these differences affect one’s own behaviors and the behaviors of others. Simulation interview data revealed 63% present KSAs of the total Cultural Knowledge KSAA instances.

Simplistic views of cultural differences can be seen among Level 2 Soldiers within the simulation interview data. The most common misconception evidenced is equating cultural differences purely to customs and taboos. Soldiers preparing for cross-cultural missions stated that a knowledge of “what not to do” in terms of greetings and avoiding offensive acts is what cultural awareness is. According to the team ranking data, they may have “little to no ability to understand any culture outside the US culture” and do not “understand why local nationals require such different treatment than American contractors.” In addition, Level 2 Soldiers almost universally are unable to recognize their own cultural biases as Americans and, as a result, will focus interactions primarily on convincing others of “the American Way” of doing things.

This conceptualization level of awareness was most evident in the simulation interview data when Level 2 Soldiers would describe their preparation efforts for the mission to the new country in Segment 1. They often focused only on tactics and fundamental language skills, and if they spoke of cultural differences at all, they tended to only consider differences in dress, eating, greetings, and other surface-level categories.

Cultural Acuity. This factor is defined as assessment ability and is comprised of Perspective Taking, Sensemaking, and Big Picture Mentality. Simulation interview data revealed 71% present KSAs of the total Cultural Acuity KSA instances. At this level we expect the Soldier to follow patterns that he/she has experience with, but to be unable to make sense of newly encountered situations.

In the team ranking data, we found that Soldiers at Level 2 struggle with making sense of cultural encounters or situations that they observe. They have been described as “needing most encounters explained at all levels,” having an inability “to understand the dynamics of cultural encounters,” and “occasionally needing nudging from more experienced Soldiers in making sense.” However, as Soldiers progress through Level 2, their emerging cognitive abilities will begin to manifest in both an “emerging ability to assess situations and diagnose cultural conflicts,” as well as an “emerging ability to predict how a situation will evolve.” As they approach Level 3, some Soldiers may even have a “moderate ability to perceive subtle nuances” and become “quicker to diagnose the heart of a cultural encounter.”

In simulation interviews, ineffective Sensemaking was indicated by a Soldier’s failing to focus on important cultural cues. In some cases, these cues were the current physical needs of locals as evidenced by such things as clothing, sanitation, and electricity in Segment 3 and 6. In meetings, such cues involved identifying the power structure by noticing side discussions, where attendees focused their attention, and differences on clothing style (Segment 2).

In terms of Perspective Taking, Level 2 Soldiers described in the team ranking data perceive the world from “the American Way” perspective. When attempts are made to understand how others are thinking or feeling, they involve the Soldier placing himself, in his own mindset, into that situation versus truly trying to understand how someone with a different background and perspective might think about that situation.

Indicators of such perspective taking are in line with the Minimization stage described at the start of this section. By this we mean that people at this stage accept others by believing that others are much like themselves. Examples are statements such as “I knew how he felt because I would feel the same way,” “I would try to make them see our way,” or “They need to understand that this is what’s best for them.”

Interpersonal skills. This factor consists of Self-Monitoring, Rapport Building, Relationship Building, and Manipulation/Persuasion. Simulation interview data revealed 74% present KSAs of the total Interpersonal skills KSA instances.

From the team ranking data, we learned that Level 2 Soldiers will employ basic interpersonal skills in the context of the mission. They will learn and utilize basic greetings, distribute gifts to civilians, and avoid the use of hostility and force as the primary means of persuasion. They will apply a template of sorts to interactions, using the same strategies and thought processes that they might with American civilians. They will be professional, but often very formal and somewhat directive in their interactions. Some of these Soldiers may “tend to butt heads in dealings with other cultures.” We suspect this is due to limited Perspective Taking ability and low Uncertainty Tolerance.

Developmental Level 3 – Intermediate

A Soldier at Level 3 sees the “big picture” in cross-cultural situations more effectively than Level 2 Soldiers and can appreciate how relationship building efforts will pay off in the long run. However, in making sense of complex, dynamic cultural encounters, this Soldier may focus too heavily on independent features of a situation and fail to synthesize the broader implications. Pattern recognition guides decisions and expectations, allowing for the ability to anticipate future problems. Performance is still analytic and deliberate, as opposed to the fluid performance of the expert, but is more efficient and organized. A plan guides the performer’s strategy for interactions at this stage, but adherence to it may limit the ability to flexibly digress or to recognize new information as it becomes available. The Intermediate Soldier is emotionally involved and feels ownership of success or failure.

Based on experience, many Soldiers who have had multiple deployments may fall into this category unless they have strong negative experiences, very limited cross-cultural contact, cross-culturally inept leaders, or inflexible negative attitudes during their deployments. Soldiers without deployment experience, but with strong interpersonal skills and/or positive non-military intercultural experience may also be at Level 3.

Level 3 cross-cultural competence in individuals can be characterized as follows. Level 3 Soldiers, as grouped in the team ranking interview, possess at least a moderate degree of self-efficacy and dedication that enable them to persevere in cross-cultural encounters where Level 2 Soldiers would tend to give up. As one respondent described, these Soldiers demonstrate a “genuine concern for accomplishing the mission.” This concern manifests itself culturally in limited, beyond-required measures to learn about the culture. Some of these Soldiers use this knowledge for immediate mission purposes, while others have a genuine interest. They show patience when frustrated and will not

give up at the first sign of failure. A frequent descriptor of Level 3 Soldiers in both critical incidents and the team ranking data involved them engaging in interactions beyond the minimum required, even during off-duty hours and assuming some risk, and displaying the proper emotions/actions in most situations, whether felt or not. They are typically able to gain the trust of their foreign counterparts and other nationals, and all have fundamental rapport and relationship-building abilities that they use with varying success. Further, nearly all Soldiers at this level will quickly develop a fundamental understanding of key phrases and often more language. They recognize the importance of overtly respecting customs, and they can be counted on to quickly pick them up.

Limitations of the Level 3 Soldier based on critical incident elicitations regard perspective taking abilities. When these Soldiers described situations where they were attempting to assume the perspectives of others, more often than not they did not consider the unique circumstances of the other person. A few Level 3 Soldiers recognized that they may not see situations in the same way as someone from another culture, but for the most part, like Level 2 Soldiers, they described perspective taking as applying their own American perspective to the situation of the locals.

Another potential limitation of the Level 3 Soldier concerns the impact of empathy on mission performance. Some Soldiers at Levels 3 and below may have a tendency to let feelings of empathy impact mission performance. Level 4 Soldiers, as discussed later, while possessing similar or even increased abilities to empathize, are always able to leverage empathy when needed for the mission, while effectively “tuning it down” when it has the potential to interfere with mission goals.

Level 3 Soldiers discussed the importance of treating and using their interpreters effectively and taking the time to develop a comfortable working relationship to the extent that it facilitates effective interactions. However, the relationship with the interpreter did not usually go beyond work. The Level 4 Soldier, as will be discussed shortly, can fully recognize the longer-term benefits of developing a lasting personal relationship with the interpreter and integrating the interpreter fully into the team. Level 3 Soldiers, as evidenced in team member ranking descriptors, still “have limits on what they will tolerate” and “may become frustrated and angry in extreme circumstances.” Table 10 provides an overview of Level 3 competence.

Table 10
Overview of Level 3: Intermediate

A Soldier at the intermediate level is effective at relationship-building and persuasion due to displaying interpersonal abilities, empathy, and cultural awareness. However, these skills are not optimized due to limited openness and perspective taking ability. A Level 3 Soldier leader takes responsibility for the cultural interactions of his/her Soldiers, and provides effective guidance on how to avoid cross-cultural incidents.		
Factor	Description	Example Statements from Interviews
Cultural Maturity	Shows consistent ability to control emotions	"Keep cool! Just try your best to stay under control."
	Engages in interactions beyond the minimum required	"I would go around and talk to the locals and see what they think of the situation and get their overall sentiments."
Cognitive Flexibility	Appears generally comfortable with uncertain situations	"Have to go in there just knowing you have to trust knowing that he could be telling you something wrong."
	Generally withholds judgments of differences in culture and customs	"There could be multiple reasons why they late or didn't show up."
Cultural Knowledge	Demonstrate awareness of his/her own cultural biases	"The cultural differences play a part...I'm assuming that they went in there and force-fed their beliefs onto them."
Cultural Acuity	Generally considers the point of view of others	"Everyone has a motive for why they help you – this source might just not like the guy and name him or they could be competing."
	Demonstrates sufficient abilities to perceive and consider the big picture of a situation	"Main goal is to reestablish good relations with village and elder."
Interpersonal Skills	Demonstrates general ability to rapidly and effectively develop rapport with locals and to build trust and cooperation	"You have to get a good rapport with the leader of the village. Without that, the whole mission won't work."
	Displays limited willingness to take risks in relationship building	"Informal (in meeting interpreter) – to establish a trusting relationship, just to get his background...a personal level and give him information about myself to build trust."

The following descriptors of cross-cultural performance at the Intermediate Level are grouped by factor and are based on team ranking and critical incident data, as well as on examples and KSAA analysis from the simulation interview data.

Cultural Maturity. This factor is comprised of five KSAA: Emotional Self-Regulation, Self-Efficacy, Dedication, Willingness to Engage, and Emotional Empathy. Simulation interview data revealed 89% present KSAA of the total Cultural Maturity KSAA instances. Please refer to Table 5 for percentages of instances organized by individual KSAA.

Self-Efficacy improves in Level 3. While recognizing the inherent challenges involved in cross-cultural environments, Level 3 Soldiers are relatively confident that they can handle them. Through successful experiences, either within missions or elsewhere, their performance improves due to a “big leap because of confidence in their own assessments” according to our team ranking data. For example, in the simulation interview, when meeting their interpreter for the first time (Segment 2), most Level 3 Soldiers were comfortable with the fact that they did not know anything upfront about him. They felt confident that they could both develop a working process for an upcoming meeting and develop a solid relationship over time. In regards to the meeting, while Level 3 Soldiers recognized that one hour is little time to prepare, most regarded it positively and had no thoughts of delaying or canceling it. They were confident in their abilities to manage the meeting no matter who was in attendance or what would be on the agenda.

Insights from our team ranking data are that Level 3 Soldiers are willing to engage in informal and formal interactions with locals if there is an immediate or even longer-term perceived benefit. Most Level 3 Soldiers view this as a positive challenge, and an inherent part of the mission. In the team ranking data, we see that they usually “enjoy conversing; enjoy learning about (the other) culture,” and have had reinforcing experiences “interacting with people of other cultures and had successful encounters.” The primary difference that separates them from Level 4 Soldiers is that they have a “limited willingness to take risks in relationship building” that is disproportionate with the potential benefits. They will frequently eat with the locals and may even “learn the language [and] participate in town activities,” but will limit these activities if they are highly inconvenient, time consuming or too far removed from comfort zones.

At this level of development, we believe all Soldiers possess some degree of Emotional Empathy. There is no strong evidence, however, about the degree of empathy required to support mission success. That being said, it appears that most Soldiers at Level 3 as seen in the team ranking data have a genuine “concern for the locals and did sympathize with their situation.” Indicators of empathy in the simulation interview were found in Soldiers’ reactions to the overall plight of the local populace (Segment 3), the forced child labor and sexual exploitation (Segment 1), to the elder’s possibly conflicting situation (Segment 4), and to the injured child (Segment 5). Many Level 3 Soldiers specifically pointed out their objectives as “potentially stopping the movement of children...support for those children.” They made many statements of concern for the children and people of the country, stating that “no one deserves to live that way.” They

describe the worst possible outcome of searches being “go into house and firefight and a lot of innocent people die, worst is children” versus others who would say that not finding the insurgent is the worst outcome. After a boy is struck in the house search, many Level 3 Soldiers immediately focus on the boy’s injuries, asking for permission to treat him.

Cognitive Flexibility. The three KSAs comprising this factor are Flexibility, Openness, and Uncertainty Tolerance. Flexibility increased somewhat over the Beginner level as is consistent with our expectations based on the cognitive stage model. Simulation interview data revealed 79% present KSAs of the total Cognitive Flexibility KSA instances.

Level 3 Soldiers are usually comfortable with the uncertain situations they encounter during deployments, and, with some deliberate focus, they can adjust their plans and perceptions in most standard situations when needed. They realize that relationships and trust take time to develop and that “you don’t just give (people) trust right away,” but rather “be observant (and) gather info.” This ability to withhold judgment in the face of uncertainty distinguishes a Level 3 Soldier from those in lower levels. However, limited uncertainty tolerance was demonstrated by a few Level 3 Soldiers who, upon receiving intelligence on the insurgent’s whereabouts from a trusted source (Segment 4), would not even consider going to the elder with the information or acting on it in any way until they could get some confirmation from multiple sources. This over-cautiousness could have allowed the insurgent to escape. In most Soldiers’ opinions, the benefits of engaging with the elder about finding the insurgent outweighed the risks.

Cultural Knowledge. This factor is based on Awareness of the differences among cultures and how these differences affect one’s own behaviors and the behaviors of others. Simulation interview data revealed 79% present KSAs of the total Cultural Knowledge KSA instances. The key discriminator is whether this is in-depth rather than surface knowledge, indicating progression toward an ethnorelative stance and supporting more effective assessment of cues and patterns and communication.

Our team ranking data reveal that Soldiers at this level are more aware of their own biases and how they influence their perceptions, but still most often consider cultural differences in terms of customs. They will clearly be “aware of the most obvious cultural differences.” They will begin to develop an understanding “of culture past just the major dos and don’ts.” They begin to recognize differences in guiding attitudes, perceptions toward time and control over life, and other factors that influence actions. Regardless of their knowledge level, they are aware of and respectful of cultural traditions and taboos. Deeper knowledge was evidenced in the simulation interviews when Soldiers recognized the importance of studying the culture of the region prior to deploying in Segment 1, but Level 3 Soldiers still exhibited some tendencies to focus on avoiding offenses versus leveraging cultural awareness to proactively shape encounters, especially in highly ambiguous contexts.

Cultural Acuity. This factor is generally defined as assessment ability and is comprised of Perspective Taking, Sensemaking, and Big Picture Mentality. Simulation interview data revealed 92% present KSAs of the total Cultural Acuity KSA instances.

The most significant progress between Level 2 and Level 3 is the ability to observe and interpret cultural situations. Level 3 Soldiers, at a minimum, are “aware of how to read the locals a bit,” but over time develop the abilities to “rapidly and accurately assess...intent and motivation,” which supports the ability to “predict unfolding cultural situations.”

Effective Sensemaking ability was demonstrated throughout the simulation interview by Level 3 Soldiers. For example, during an initial meeting with local leaders (Segment 2), Level 3 Soldiers usually knew to observe subtle cultural indicators, such as “general overall nonverbal communications not just from the leader but his subordinates also; they will tell more than the leader,” “the demeanor of the person--do they seem sincere...if they’re going to deliver what they say, how disciplined the troops are, how they present themselves when they speak to me, are they educated, speaking proper English,” and “their body language and mannerisms, tone of voice, how they act and interact with each other, us and interpreter.” On the other hand, Level 2 Soldiers who tend to focus mainly on tactical factors such as positions of exits and numbers of guns.

A few Level 3 Soldiers did show good perspective taking. For example, instead of becoming angry after the elder’s perceived deceit (Segment 5), one Soldier stated, “(My) present feelings are the same toward the elder. You have to realize that you are in their country. You are an outsider. He is elder of the village.” Most often, however, responses to the elder involved convincing him of the US perspective: “He needs to understand that you’re doing your job, you told him what you’re doing, and if he doesn’t accept it, you have to explain to him the circumstances of everything.”

Interpersonal Skills. This factor consists of Self-Monitoring, Rapport Building, Relationship Building, and Manipulation/Persuasion. Simulation interview data revealed 94% present KSAs of the total Interpersonal Skills KSA instances.

The team ranking data reveal that Soldiers at Level 3 “realize [that] working relationships must be built up for most effectiveness and to accomplish the mission” and are “aware that trust takes time to develop.” The primary limit at Level 3 concerns the breadth and depth of the relationships that are developed. Level 3 Soldiers still have difficulty developing effective relationships with locals whom they dislike or distrust, even if those relationships would support the mission. And with locals they do like, the relationship does not typically progress to a point where the local becomes an active supporter, going beyond what is requested to actively search for insurgents, promote pro-US sentiment, or look out for the well-being of the Soldiers.

Level 3 Soldiers understood the importance of building cross-cultural relationships in the simulation interview, and the methods they described to do that demonstrated their abilities. These Soldiers displayed patience, active listening, and a willingness to share personal information and reveal information about themselves in order to foster positive relationships. In initial dealings with their interpreters (Segment 2), they usually began by asking informal, questions about the life, interests, and family of the interpreter before preparing for the meeting,

even under time pressure. They recognized the value of this initial interaction in both building short-term rapport and setting a solid foundation for an effective relationship throughout the deployment. They would “want to know about him, his family, what his cultural background is,” and “take him out for food, let him get to know about me.” They generally recognized that trust may not come automatically, but that, if efforts are made, it will develop over time. They all made efforts in an initial visit to a potentially angry village (Segment 3) to meet with the elder, not to lay down guidelines, but rather to “explain who I am what my mission is and to sit down and let them get to know who I am as a person without having business discussions first. The most competent Soldier will be flexible enough to adjust strategies mid-course based on the situation. Another difference between Level 3 and 4 Soldiers is the extent of openness/listening that occurs in relationship building. The observable difference between Levels 3 and 4 is evident in the KSAA of Perspective Taking. Level 3 Soldiers were focused on trying to explain the positive contributions of the US Forces, rather than taking the perspective of the locals and determining what they need or want.

Developmental Level 4 – Advanced

Similar to individuals at Bennett’s ethnorelative stage of Adaptation, the Level 4 Soldier (Advanced) can smoothly and effectively adapt their perceptions, emotions and behaviors to leverage unfamiliar cultural situations. Major defining characteristics of individuals at this level are a keen awareness of the consequences of their actions and interactions on the cultural aspects of the mission and an ability to actively apply their general cultural skills to mission success. They rapidly adjust and adapt to their surroundings and are generally the first to recognize subtle aspects of a cultural encounter. Above all else, Level 4 individuals are **active learners**. They typically view cross-cultural experiences as opportunities to learn, experience new things, and most of all, to exceed mission goals through the application of their cross-cultural abilities. They not only have a very strong, positive learning orientation but also actively seek to share their knowledge and awareness with less-experienced Soldiers.

The mission always comes first for these Soldiers, and they have an understanding of the consequences of their actions on a short- and long-term basis. In addition, they also possess an “above and beyond” mentality. These abilities allow the Soldiers to take their time developing relationships and weigh the risks accordingly. Such Soldiers are very aware of their cultural biases and weaknesses, and they persevere in challenging situations. The combination of high self-monitoring and high emotional self-regulation allows them to be somewhat “chameleon-like,” changing their overt behaviors and overt personalities as needed to suit the mission. But emotional empathy also drives their actions, resulting in a genuine aspect to their interactions that enhances their abilities to persuade and negotiate. When situations become intense, the Level 4 individuals stand out because they can effectively control their empathy, turning it on and off as needed.

Table 11
Overview of Level 4: Advanced

Advanced Soldiers possess the highest level of cross-cultural competence levels. These Soldiers integrate true awareness of cultural differences into all aspects of the mission. They display appropriate affect, which supports perspective taking, negotiation, persuasion, and manipulation abilities. They develop genuine relationships with locals. Their pre-deployment preparation efforts include a study of relevant cultural aspects of the region, as well as assessments of subordinates' abilities.		
Factor	Description	Example Statements from Interviews
Cultural Maturity	Very level-headed and displays ultimate patience; always controls emotions and manages stress effectively so that emotions do not interfere with performance	"Get in your mindset. Make yourself friendly and supporting. Feelings are neutral: feelings stay out of it; focused on mission."
	Demonstrates high level of confidence to handle challenges of cross-cultural environment	"Very prepared. Personally, my personality is I'm people driven, can communicate with anyone."
Cognitive Flexibility	Consistently demonstrates ability to tolerate ambiguous situations and make sound decisions within them	"Think quick on feet, not easily rattled. Situationally aware. "
	Demonstrates open-mindedness, interest in, and willingness to accept cultural differences without judging	"...Be open-minded; have tried to develop a good relationship with your interpreter and draw on their experiences ."
Cultural Knowledge	Demonstrates awareness of own cultural biases and understands the importance of not letting them interfere with the mission	"One big thing is probably different cultures view time and schedules very different. "
Cultural Acuity	Accurately assumes the point of view of foreign citizens and understands its importance	"...I would be trying to figure out what their motivations are. "
	Demonstrates keen ability to observe and diagnose cultural situations and pick up on subtle cultural cues	"Condition of village and of the people. How they look at us. Are we getting less than friendly looks?..."
Interpersonal Skills	Shows ability to adjust behavior in a socially appropriate way depending on situational cues	"First impressions are key, so we need to know how to present ourselves."
	Demonstrates high level of effectiveness at persuasion	"...I would congenially ask elder to accompany us over to the house to allow him to act as an intermediary between us and people who live in the house..."

The following descriptors of cross-cultural performance at the Advanced Level are grouped by Factor and are based on team ranking and critical incident data, as well as on examples and KSAA analysis from the simulation interview data.

Cultural Maturity. (Comprised of Emotional Self-Regulation, Self-Efficacy, Dedication, Willingness to Engage, and Emotional Empathy) Simulation interview data revealed 92% present KSAA's of the total Cultural Maturity KSAA instances. Please refer to Table 5 for percentages of instances organized by individual KSAA's.

While Level 4 Soldiers generally “want the best outcome possible for men, women and children alike,” as described in team ranking data, their increased empathy is mission-centric. That is, they will not let their feelings of empathy negatively impact the broader mission. For example, a critical incident describes one Level 4 Soldier witnessing a local leader with whom he had built a strong relationship brutally beat a subordinate for a perceived slight. The Soldier, while having strong empathetic feelings toward the subordinate, recognized that any actions he might take to help the individual would be seen as disrespectful by the leader and would severely damage the critical relationship that was essential to this mission's success. He exercised emotional self-regulation, temporarily “turned off” his empathy, and withheld from taking protective action. In relaying the story, this Soldier was not happy about the situation, but he knew his (lack of) action was mission-critical. Note that Level 4 Soldiers all do feel some degrees of “genuine compassion” as well as “sympathy and openness” toward the people they are supporting, and will often invest personal resources to help them.

Level 4 Soldiers are extremely devoted to mission success in cross-cultural environments. team ranking data describes this dedication in such ways as “not (giving) up regardless of how long it takes to accomplish the mission,” “possess(ing) a ‘dogged determination’ – (an) ability to fail and try again repeatedly.” Critical incident and simulation interview data revealed multiple instances of high dedication when Soldiers assumed full responsibility to locals for negative actions of any US force and held their own Soldiers to a high standard of conduct in cross-cultural interactions. In dealings with an elder in the simulation interview (Segment 4), one Level 4 Soldier states that he would tell the elder “I will be personally accountable for what happens” during an upcoming home search. Another Level 4 interviewee, after his subordinate strikes a child during the search (Segment 5), has “one of my NCO's (grab) him by his stack and swivel and have him apologize on the spot.”

As evidenced repeatedly in the team ranking descriptors, Level 4 Soldiers will often set cultural development goals for subordinates and create opportunities to “share knowledge and awareness of the culture with other(s).” In preparation for deployment, they “take time to do additional research of the culture” beyond the standard, and they will also “set up functions to allow other personnel to learn the culture” as well. All 11 Level 4 Soldiers in the simulation interview spoke of taking significant time to prepare for the deployment (Segment 1), with one saying the greatest mistake is “going in ignorant, don't bother to learn customs, people. Feeling that this is a useless mission.”

In elicited critical incidents where valued trust relationships with local leaders expose Soldiers to observed extreme degrees of subordinate mistreatment, political corruption, or disturbing sexual practices, Level 4 Soldiers discussed the need for emotional self-regulation to

control their overt reactions, especially when those reactions would only serve to damage the relationships. As described in the team ranking data, these Soldiers remain “very level-headed” and “display ultimate patience,” even under the most frustrating or disturbing circumstances where other Soldiers would reach their limits.

Within the simulation interview, when local volunteers failed to show up for the second day in a row for scheduled training, not one of the 11 Level 4 Soldiers responded with anger. In fact, as one Level 4 Soldier responded, they see as a key to success, to “make sure that I don’t get irate over the fact that these people didn’t show up” because it would serve no positive mission purpose. They describe the importance of “calmness of mind, patience, and the ability to think things through.”

Most, but not all, of the highest level Soldiers from the team ranking data were described as showing a strong and genuine willingness to engage with local populations. A typical descriptor of this Level 4 Soldier is “(being) very interested in the culture and always want(ing) to learn more.” Another is described as wanting to “interact and spend off time with civilians” while another yet is described as being “very willing to jump into novel cultural situations.” These Soldiers may take reasonable risks in building relationships if it benefits the mission.

Willingness to engage was also evident in the simulation interview data. Upon first arriving in Burundi after a long flight, none of the 11 Level 4 Soldiers expressed anger or frustration at a local leader’s request for an immediate meeting (Segment 2). Rather, they saw it as a promising opportunity to get the deployment started right with a positive interaction. One Level 4 respondent stated: “regional governments can give you background on the culture. They can give you historical information that can impact the mission. (I) definitely feel good (about the meeting). It’s a good thing overall.”

Cognitive Flexibility. This factor consists of Uncertainty Tolerance, Openness and Flexibility. Simulation interview data revealed 95% present KSAs of the total Cognitive Flexibility KSA instances.

Level 4 Soldiers distinguish themselves from lower levels in their high tolerance of uncertain cultural situations. This ability also distinguishes experts from non-experts in other domains. Cross-cultural missions are inherently uncertain endeavors, and descriptions of highly competent Soldiers from the team ranking data frequently refer to high uncertainty tolerance. “The ability to operate in ambiguity” is a key feature that one team member used to describe the most culturally competent member of his team. Another describes all the highest-level individuals as “quickly feel(ing) comfortable in their surroundings.” This is in contrast to some Level 3 Soldiers and many Level 2 and Level 1 Soldiers who may lose opportunities to engage locals and further mission goals when they become too uncomfortable with the unknowns.

This is not to say that Level 4s do not display enough caution; rather, they can find the optimal balance of risk and caution that allows them to adapt and adjust when conditions change, versus waiting for complete information. Level 4s succeed in part because they are flexible and adaptable. Team ranking data describe them as “constantly re-evaluat(ing) what’s working and what’s not working and adjust(ing) their plans” based on the changing situations. In the

simulation interview, Level 4 Soldiers tended to recognize the inherent uncertainty of conducting a search of a home where an insurgent may or may not be hiding (Segment 4). Whereas most Soldiers would tend to conduct the raid on their own regardless of the elder's and village's feelings, several Level 4 Soldiers were flexible enough to recognize the opportunity to adjust their plans to include the elder, and to change from a search to a "friendly visit." Some Level 4 Soldiers also spoke of leveraging local forces in the search, if available. It did not matter to these Soldiers that they would not lead the search, as long as the end goal was achieved. They recognized available resources and adapted their thinking to achieve the immediate goal while trying to maintain the relationship. They also tended to realize, however, that waiting for more information (i.e., certainty) about the insurgent's presence could be costly, creating a window of opportunity for the insurgent to escape or call in reinforcements.

Descriptors from the team ranking data also referred to the overall openness of Level 4 Soldiers. They were described by one respondent as: "(they) don't just jump to any fast conclusions (about the intent of locals or reasons behind behaviors when confirming information is in short supply)." Other respondents described how highly competent Soldiers would arrive in-country "without set viewpoints or biases," and "very open-minded and willing to accept cultural differences without judging" throughout the duration of their deployments. Within the simulation interview, after an elder's apparent deceit (Segment 5), none of the 11 Level 4 Soldiers talked of passing judgment on the elder and most recognized that they had incomplete information. When asked how he felt about the elder after the incident, one Soldier who rated Level 4 replied, "Indifferent, because I still don't know his motivations for what he did. He has a lot going on, with the boy's injury. Until I understand why he is upset, I cannot judge. Is he actively supporting the insurgents or just scared?".

Cultural Knowledge. Simulation interview data revealed 89% present KSAs of the total Cultural Knowledge KSAA instances. The Level 4 Soldiers in the interview seemed to understand that cultural differences go far beyond customs and taboos, and this is what led to their accurate perspective taking. They realized differences in perceptions of time, acceptance of societal levels, and degrees of mastery over circumstances, and were able to generate expectancies of how these differences might influence attitudes and behaviors. Further, these Soldiers seemed acutely aware of their own cultural biases and discussed the importance of not letting them influence their own attitudes, assessments, or behaviors. Team ranking data describes these Soldiers in such ways, rather than working to minimize the differences by forcing their perspective on others, they "understand and embrace these differences," using them as leverage points to better achieve their missions. On deployments, as one respondent described, they will vocally emphasize to other Soldiers that "you become educated on (local's) way of life before forcing the American way upon them." In the simulation interview, rather than get frustrated by the no-shows at a training session for a volunteer force (Segment 6) and blaming it on collective laziness or even lack of transportation, as did other Soldiers, Level 4 Soldiers understood that deeper cultural differences could be a factor. Consider one Level 4's response: "Well first of all their culture is going to probably be different than ours. If you're expected to be at a certain place at a certain time in our culture you will be there, and in any western culture for that matter. With this agricultural economy that they have, they are probably a little more laid back when it comes to time."

Cultural Acuity. This factor is comprised of Perspective Taking, Sensemaking, and Big Picture Mentality. Simulation interview data revealed 99% present KSAs of the total Cultural Acuity KSA instances.

Team ranking data suggest that Soldiers at Level 4 have a well-developed ability to accurately assume the perspective of foreign citizens. There is a distinct difference between being able to understand about how you would think and feel in a particular situation (Level 3) versus applying cultural awareness to understanding how a local thinks and feels in that same particular situation. This ability appears very natural for the Level 4 Soldiers as described in the data and is evidenced when grouped with a big picture understanding. As one respondent describes, these highest-level Soldiers “have the ability to go native, coupled with the ability to smoothly move into and out of the native state as needed to achieve the mission.” Soldiers rated at Level 4 in the simulation interview would frequently ask for the interpreter’s view throughout (“from his perspective, how does he think the government will feel toward us; what are some potential conflicts”), recognizing that the interpreter has unique insights based on his cultural background and experience. They also tended to recognize that a particular insurgent, while a bad person in the eyes of the US, might be viewed differently by the locals. One Level 4 Soldier stated, “the insurgent might be close to the village, a family member perhaps. They may consider this guy a hero, and we consider him a criminal.”

In terms of Sensemaking, while the data suggested that most Level 3 Soldiers have a baseline ability to interpret cross-cultural encounters and situations, Level 4 Soldiers appeared to have a “keen ability to observe and diagnose cultural situations,” as one respondent described. Level 4 Soldiers were described in the data as being able to notice subtle perceptual cues in cross-cultural environments that other Soldiers would miss, whether it be a slight gesture, a gradual shift in crowd behavior, or a subtle nuance in terminology during a discussion.

Compare the depth of this Level 4 partial response to what he would be observing in the first meeting with local elders (Segment 2 of the simulation interview) to the typical Level 1 or 2 response, which typically focused only on security positions and weapons: “Get a feel for people. Are they broken into cliques/clusters? What attitudes do they have? Are they getting more agitated as the meeting progresses? Are groups seated together or dispersed? Are groups dressed differently? Do we have any priests in room? Any military figures? How are they all interacting? Do they all look towards a particular person when meeting is getting called to order?”

Level 4 Soldiers were also described as being able to “process the second and third order effects of their actions” more accurately than others, and they are often turned to by Soldiers at lower competence levels as a “reality check” to ensure that actions taken will not have unforeseen, broader consequences. Other descriptors of these highest-rated Soldiers include “(the ability to) accurately predict (the) long term ramifications of actions” and can be “immersed in culture yet maintain US mission and end goal(s).” This Big Picture Mentality was often described as enabling Level 4 Soldiers to operate effectively regardless of the cultural environment. This ability to clearly and fully see the broader impact of their actions on the overall cultural mission was a key factor that appeared to distinguish Level 4 Soldiers from those who ranked lower. A Big Picture Mentality was evidenced throughout the simulation interviews.

Level 4 Soldiers described the importance and value of sacrificing potential immediate gains (e.g., gaining immediate intelligence on an initial visit to a new village) in favor of the longer term benefit of establishing a solid foundation for a relationship with the village (Segment 3). Instead of rushing for the “low-hanging fruit” such as immediate intelligence, several Level 4 respondents discussed making several visits to the village, eliciting requests for help, and providing the help when possible, before ever asking for something in return.

Interpersonal Skills. Simulation interview data revealed 100% present KSAs of the total Interpersonal Skills KSA instances. Whether developed prior to service, over the course of several deployments, or from a combination of both, Level 4 Soldiers are described as having potent interpersonal skills that they leverage effectively in cross-cultural interactions. Team ranking data describe these most competent Soldiers as being able to use their own personality characteristics very naturally, whether outgoing, soft-spoken, humorous, or otherwise to interact well with locals, regardless of the circumstances. Specifically Level 4s were described as being “able to leverage strong social skills/charisma to overcome cultural faux pas” in novel environments, and most often “build lasting friendships with people from the (foreign) unit and local populace.” Level 4 Soldiers were also described as being powerful persuaders. Where others might back down for fear of offending, Level 4 Soldiers were described as having the “ability to push back (and are) not intimidated in negotiations.” They are described as using a variety of strategies to subtly guide interactions and achieve desired short- and long-term goals. One respondent stated that these Soldiers, by the end of their deployments, often “can speak conversationally with (the locals)” and will have built friendships that extend beyond the deployment. While some may argue that this is irrelevant to the mission, several of the critical incidents revealed situations where highly competent Soldiers leveraged such friendships to help protect future deployment teams and build a lasting foundation for pro US sentiment within the region.

Discussion

Developmental Model of 3C

Analyses of the simulation interviews, team ranking interviews, and critical incident interviews data collected to date have provided us with rich descriptors of the factors comprising 3C. When these findings were integrated with the review of other cultural and developmental models, a developmental model of 3C emerged. The other models provided insight into how KSAs can evolve over time and may be distinguishable at different levels of development. Specifically, the DMIS (Bennett, 1993) is consistent with our descriptions of affective attributes of 3C. The General Stage Model of Cognitive Skill Acquisition (Ross et al., 2009) provided performance-based descriptors across novice to expert stages of development. The General Framework for Cross-Cultural Competence (Abbe et al., 2007) presented a framework that describes the cognitive, behavioral, and affective components of 3C. Although the reviewed models provided useful guidance on structure and level breakdowns, the empirical data from Soldiers provided the primary content of the model and descriptions of levels of competence development.

Figure 2 shows the Developmental Model of General Cross-Cultural Competence, which proposes four developmental levels of 3C (Level 1: Pre-Competent, Level 2: Beginner, Level 3: Intermediate, and Level 4: Advanced) and describes each in terms of the five factors identified from our research. The model presents the factors according to where each tends to distinguish levels of competence based on our analyses and additional hypotheses. It is important to note, however, that the placements merely suggest where these factors may tend to first emerge, are most prominent or may be central to distinguishing one level from another. Different Soldiers develop differently, and they have different skill sets based on their prior, non-military experiences. These experiences can greatly influence their general 3C, providing some deployment-inexperienced Soldiers with a high degree of 3C, whereas other Soldiers with significant deployment experience may be very limited in their cross-cultural abilities.

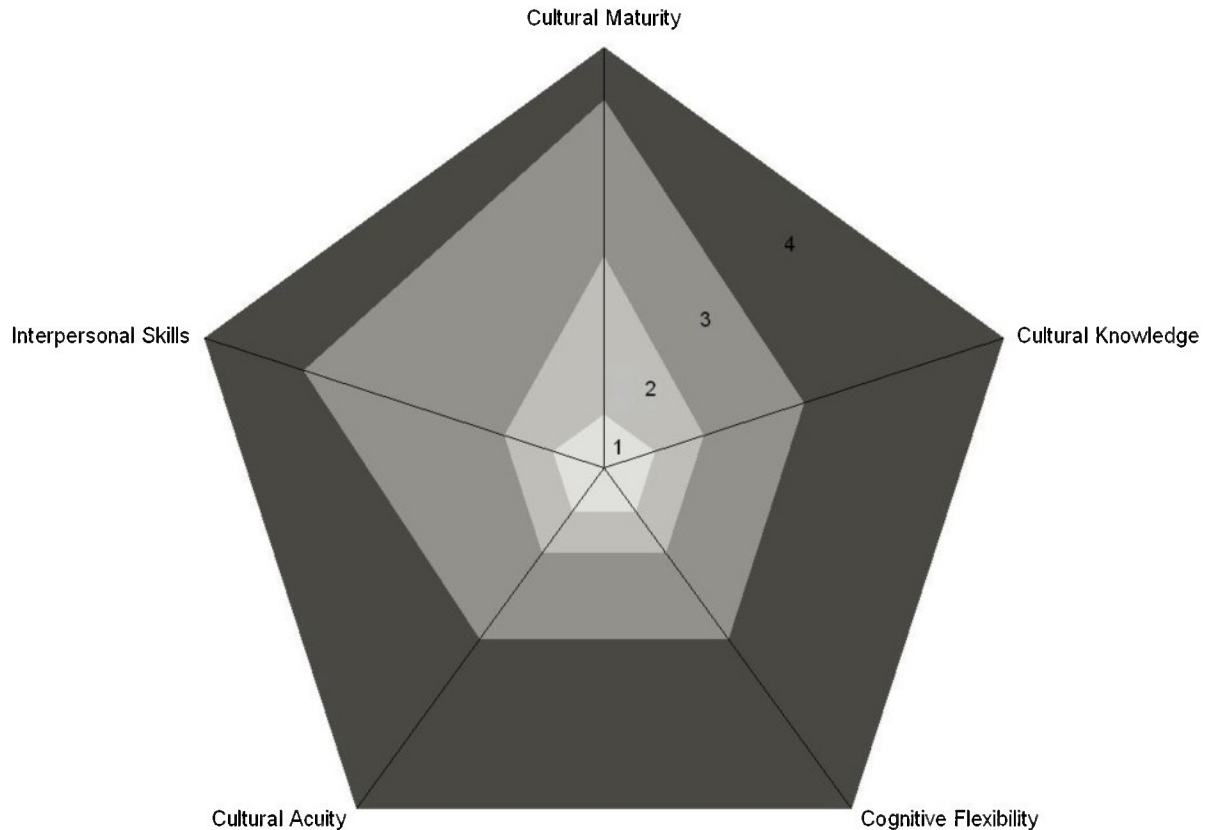


Figure 2. The Developmental Model of Cross-Cultural Competence.

Referring to Figure 2, the inner area with the lightest shading represents a Level 1, Pre-Competent Soldier. None of the 5 factors have developed significantly, so this area noted with a 1 essentially represents ground zero in development within any factor. Moving outward from the inner area, increases in shading density represent higher levels of 3C. For instance, most factors are higher for the Level 2 Soldier, but the most substantial difference that distinguishes a Level 1 from Level 2 Soldier is in Cultural Maturity. Distinguishing Level 3 from Level 2, we propose that all factors show improvement, with the most substantial increase being in Interpersonal Skills. Overt behavioral abilities for the Level 3 Soldier will be solid, but cognitive abilities will still be limited, which, in turn, will prevent Interpersonal Skills from fully developing. It is in moving to Level 4, the darkest-shaded outer area, where the cognitive factors (Cultural Knowledge, Cognitive Flexibility, and Cultural Acuity) will show the greatest improvement and the Soldier will be most accurate in his or her cross-cultural assessments and the most effective in actions. Cultural Maturity differences will be smaller, as the Level 3 Soldier will have already developed high dedication, emotional self-regulation, and willingness to engage.

Relationships among Cross-Cultural Competence Factors

In this effort, an empirical approach of simulation interviews and team ranking task interviews provided the basis for a model of development of cross-cultural competence. Five key factors of 3C were proposed: Cultural Maturity, Cognitive Flexibility, Cultural Knowledge,

Cultural Acuity, and Interpersonal Skills (all composed of KSAs). These factors represent groupings of KSAs into categories based on perceived similarity. We expect significant overlap among the factors as many individual KSAs could arguably be grouped in different ways. Further research, including a factor analysis, would provide insight into the accuracy of this initial factor grouping. The four developmental levels within the model (Pre-Competent, Beginner, Intermediate, and Advanced) are defined by the extent to which the five 3C factors are present at each level.

Although a factor analysis to explore the relationships among the five factors has not yet been completed, we can present some initial thoughts on how we might expect the factors to interact. First, a minimum amount of Cultural Maturity may be required before the other factors can begin to manifest in earnest. The Soldier that is not dedicated to mission success, is unwilling to interact, has low empathy, and has little confidence in his/her abilities to interact, will experience few cross-cultural situations, and thus, few opportunities to develop or demonstrate cross-cultural competence. Second, Cognitive Flexibility and Cultural Knowledge may influence and facilitate Cultural Acuity. Accurate interpretation of cross-cultural encounters and environments (a key component of Cultural Acuity) requires a Soldier to be both flexible in thinking and aware/knowledgeable of cultural influences on themselves and others. As awareness of biases and cultural differences increases, the accuracy of Perspective Taking may also improve. Third, based on the data, we suspect that there may be an interaction of Cultural Acuity and Interpersonal Skills. In other words, Soldiers that are effective at interpreting cross-cultural situations and understanding perspectives of others may be more effective at seeking and fostering interactions and relationships.

Future efforts to examine the relationships within and among factors would be of value. Specifically, understanding the relationships can support the design of training programs, assessment tools, and feedback on performance in training and in the real world. The complexity of real-world military environments requires competence in multiple KSAs that may be interdependent and difficult to account for individually. Thus, cross-cultural competence may be effectively assessed by situation-based tools such as vignettes and SJTs that capture respondents' perceptions of complex situations. In addition, responses collected via situation-based methods provide insight into the relationship between cross-cultural competence as a predictor of performance and examples of potential performance corresponding to different levels of competence.

The assessment system that will result from this effort will provide insight into predictors of effective performance in cross-cultural domains. Our goal is to construct and refine a stage model of cross-cultural expertise to use as a framework for assessing the level of competence of each Soldier.

Limitations of the Current Effort

The model development was guided by data collected from Soldiers representing a wide range of rank and MOS. The research team interviewed Soldiers ranging in rank from E-4 to E-8 and O-1 to O-5 representing a wide variety of MOSs. The primary focus was on Soldiers who had multiple deployments to several countries (Civil Affairs, Special Forces); Military Police also represented a large portion of our participant base. Although their deployment experiences

were limited, Military Police had highly interactive deployment roles where they had daily encounters with locals. We also interviewed Soldiers representing the Signal Corps, Financial Management, Medical CMF, Health Services, Chemical Branch, Transportation Branch, Ammunition, and Quartermaster Corps MOSs.

Deployment experience varied across the Soldiers we interviewed. Although some had never been deployed, several Civil Affairs and Special Forces Soldiers as well as many Military Transition Team (MiTT) members had at least three deployments, each involving significant cross-cultural interactions. The MiTT Soldiers had primarily been deployed to Iraq and Afghanistan, but the Civil Affairs and Special Forces Soldiers had been deployed to over 20 different countries, including Columbia, Honduras, Chile, Ecuador, Panama, Paraguay, Bolivia, Venezuela, El Salvador, the Philippines, and Nicaragua. We recognize that this sample might not be representative of other Soldiers in different roles. The sample reflects primarily high contact roles and missions at the tactical level. Thus, the generalizability of our model may be limited when applying to Soldiers taking part in other types of operations.

The five factors within our model were developed after an extensive review of the relevant literature and an in-depth analysis of our interview data. More research is needed, however, to determine whether the proposed five factors have captured the critical constructs and accurately represent our 16 KSAs.

For cultural missions that are solely analysis-based, the interpersonal skills may become much less relevant. Thus, the current model does not address such missions. Further research is needed to assess the relevance of our findings and model to Soldiers performing analysis functions, such as intelligence, and at the operational and strategic levels.

Next Steps

Based on the research conducted to date, we have developed a model of general cross-cultural competence that includes five developmental factors. The next stage in our research is to develop and evaluate an assessment battery targeting the KSAs that constitute these factors that consists of multiple situational judgment tests, cultural vignettes, a self-report scale, and cultural demographics. We will administer this test battery to a wide range of Soldiers and compare the Soldiers' assessment battery results to supervisor and peer ratings/rankings and to their rated performance on independently scored field exercises.

We will also develop a feedback structure based on an individual Soldier's competence level. We are currently investigating the perceived importance of cultural competence among Soldiers, as this could influence their receptiveness to feedback. This information will allow us to design feedback that is accurate and will also be perceived by the user as necessary. During this process, we will review our measures with military experts to ensure face validity. Additionally, we will use this feedback to validate our scoring system for the SJTs.

Future directions in this research area that could have long-term benefit both within and outside the Army are numerous. Specifically, further research is required to examine relationships between the five developmental factors. Also, as mentioned earlier, the developmental model we have created is based on mission sets that involve significant cross-

cultural interactions. Research to adapt and validate the model to Army mission sets with less direct intercultural interaction would expand its utility. Similarly, the study of general 3C could further benefit by research aimed at investigating the impact of a wider range of Soldier demographics.

The Impact of Negative Experience

Up to this point, we have only been discussing the positive impact of experience on the development of 3C. This is typical of the common approaches to studying acquisition of expertise. Generally, competence develops as a function of experience. However, military experiences in cross-cultural settings have a critical affective component. Soldiers can be expected to encounter stressful, life and death situations regardless of the nature of the mission. Situations, decisions, and outcomes may impact Soldiers in emotional ways. It is possible that traumatic and/or highly emotional experiences may be counterproductive towards 3C development and even cause regressions. We must consider such negative experiences within this model and examine how they impact cross-cultural competence development.

The concept of mission “burnout” in cross-cultural environments merits further attention. In critical incident interviews, we elicited several instances of Soldiers appearing to actually regress in 3C based on growing feelings of frustration, anger, or annoyance in repeated cross-cultural interactions. Our impression from data collections with over 200 Soldiers is that this is a frequent occurrence and that it can have a significant negative impact on mission success. In order to counter or better yet, prevent mission burnout, we need to first have a clear understanding of what it is, what causes it, and when, in a Soldier’s cross-cultural development, it is likely to occur. Only then can the most effective supports be developed.

References

- Abbe, A., Gulick, L. M.V., & Herman, J.L. (2007). Cross-cultural competence in Army leaders: A conceptual and empirical foundation. Study Report 2008-1. Arlington, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Bennett, M. J. (1993). Towards ethnorelativism: A developmental model of intercultural sensitivity. In R. M. Paige (Ed.), *Education for intercultural experience* (pp. 21-71). Yarmouth, ME: Intercultural Press.
- Briceno, A. P. (2009). The use of cultural studies in military operations: A model for assessing values-based differences. In P. Holmes-Eber, P. M. Scanlon, & A. L., Hamlen (Eds.), *Applications in operational culture: Perspectives from the field* (pp. 29-47). Quantico, VA: Marine Corps University Press.
- Campbell, J. P. (1990). Modeling the performance prediction problem in Industrial and Organizational Psychology. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology*, (2nd ed., Vol. 1, pp. 687-726). Palo Alto, CA: Consulting Psychologists Press.
- Chandler, J. V. (2005, September). Why culture matters: An empirically-based pre-deployment training program. (Master's Thesis). Monterey, CA: Naval Postgraduate School.
- Department of the Army. (2008). *Field Manual 3-07, Stability Operations*. Washington DC: Headquarters, Department of the Army.
- Department of the Army. (2007). *The U.S. Army/Marine Corps Counterinsurgency Field Manual*. Washington DC: Headquarters, Department of the Army.
- Department of the Army. (2009). *Army Culture and Foreign Language Strategy*.
- Dunne, J. P. (2009). Maslow is non-deployable: Modifying Maslow's hierarchy for contemporary counterinsurgency. In P. Holmes-Eber, P. M. Scanlon, & A. L., Hamlen (Eds.), *Applications in operational culture-perspectives from the field* (pp. 15-28). Quantico, VA: Marine Corps University Press.
- Hoffman, R. R., Crandall, B., & Shadbolt, N. R. (1998). A case study in cognitive task analysis methodology: The Critical Decision Method for the elicitation of expert knowledge. *Human Factors*, 40, 254-276.
- Klein, G. & Baxter, H.C. (2009). Cognitive transformation theory: Contrasting cognitive and behavioral learning. In *The PSI handbook of virtual environments for training and education: Developments for the military and beyond*. Westport, CT: Praeger Security International.

- Krulak, C. C. (1999, Jan.). The Strategic Corporal: Leadership in the Three Block War. Retrieved from the Web October 2, 2009. Available from: http://www.au.af.mil/au/awc/awcgate/usmc/strategic_corporal.htm
- Lewis, B. G. (2006, March). Developing soldier cultural competency. (USAWC Strategy Research Project: Master's Thesis). Carlisle Barracks, Carlisle, PA: US Army War College.
- McCloskey, M., Grandjean, A., Behymer, K. & Ross, K. (in publication). Assessing learning and development in Army cross-cultural competence. (Phase 1 SBIR Report.) Arlington, VA: U. S. Army Research Institute for the Behavioral and Social Sciences.
- McDonald, D. P., McGuire, G., Johnston, J., Selmeski, B., & Abbe, A. (October 2008). Developing and managing cross-cultural competency within the Department of Defense: Recommendations for learning and assessment. Patrick Air Force Base, FL: Defense Equal Opportunity Management Institute.
- Ross, K. G., Phillips, J. K., Klein, G., & Cohn, J. (2005). Creating expertise: A framework to guide technology-based training. Technical Report for Contract #M67854-04-C-8035 for the Marine Corps Systems Command, Program Manager for Training Systems. Orlando, FL: PMTRASYS.
- Ross, K., Phillips, J., & Cohn, J. (2009). Creating expertise with technology based training. In D. Schmorrow, J. Cohn, and D. Nicholson (Eds.), *The PSI handbook of virtual environments for training and education*, Volume 1. Westport, Connecticut: Praeger Security International.
- Strayer, J., & Eisenberg, N. (1987). Empathy viewed in context. In N. Eisenberg & J. Strayer (Eds.), *Empathy and its development* (pp. 389–398). New York: Cambridge University Press.
- Stringer, K. D. (2009, February-March). Educating the strategic corporal: A paradigm shift. *Military Review* (pp. 87-95). The Combined Arms Center: Fort Leavenworth, KS.

Appendix A: Example Rating for a Simulation Interview

ID	Item	KSAA	Presence or Absence of KSAA	Supporting Data
40	1.4	SELF EFFICACY	Present	Very prepared. After this past 15 month deployment, I was PRT leader. I could make it work with 24 Soldiers.
40	1.4	EMPATHY	Present	IF we have funds and ability, it is unlimited how much we can do/help. (Frequent emphasis on "helping")
40	1.5	CULTURAL AWARENESS	Present	who is majority religion in my area, is it a good area/bad area, do your homework. Gather as much info as you can. Culture in area.
40	1.6	PERSPECTIVE TAKING	Present	It's a given, you will have young Soldiers, never left home before basic training. Sit them down, get inside their heads...After a while, Soldiers will get restless homesick, Soldiers die. Make them look at big picture.
40	1.6	DEDICATION	Present	Make them look at big picture. It's not about you, it's about them. This is what Army wants you to do right now.
40	1.6	UNCERT TOLERANCE	Present	You're not gonna know until they get out there. How they deal with locals, once they get out there. They can be fine a month, but then start cussing, throwing bottles at them. Use team leaders to keep eye on younger guys. Sometimes even older guys do stuff.
40	1.7	INTEGRATION	Present	Mentally not preparing. Younger Soldiers tend to think about themselves, not look at bigger picture. You signed up to serve country. They don't see that their actions affect bigger picture.
40	1.7	DEDICATION	Present	Not seeking out peers, or digging for

knowledge, not putting nose in book or internet. Not caring.

40	2.2	FLEXIBILITY	Present	Find out who was going, how many have to go. Just me and key leaders to leave others to settle in? Then get with interpreter, get as much info as I can from him. (Not sure this is Flexibility, but it strikes me as such. He also seeks his terp)
40	2.3	SELF MONITORING	Present	Right away, say very good to meet you, I hope you're ready to get very acquainted. I look forward to a good working relationship. Whether you like interpreters or not, you have to pretend you like them. Show you care, see what they need? Is there anything you need? I'm gonna lean pretty heavy on you for help, especially the first couple of weeks.
40	2.3	RELATION BUILDING	Present	You're part of the family, if you have any problems, come to me because I'm in charge. Go back to younger Soldiers. Say he's one of us now, treat him with respect. There's a lot of young Soldiers who have trouble with terps because terps can get pushy/needy. To Soldiers, if you have problem with terp, come to be
40	2.4	PERSPECTIVE TAKING	Present	You're part of the family, if you have any problems, come to me because I'm in charge. Go back to younger Soldiers. Say he's one of us now, treat him with respect. There's a lot of young Soldiers who have trouble with terps because terps can get pushy/needy. To Soldiers, if you have problem with terp, come to me
40	2.5	SELF MONITORING	Present	Going in, being cocky confident. Trying to come in with American we're in charge perspective. It happens a lot in Iraq/Afghanistan.
40	2.5	CULTURAL AWARENESS	Present	Not preparing. Doing culturally wrong things, asking wrong questions. E.g., don't ask police chief about kids/women. Being culturally aware.

40	2.6	SENSE- MAKING	Present	I would be watching leader's reactions to us, are they genuinely excited to see us, relieved, or just sitting back, being arrogant. 'This is our country'. I would see how open they are to us. Look at where meeting is taking place. Is it run down? Or are they living in the lap of luxury while others 5 minutes away are very poor? How they react to you.
40	2.6	OPENNESS	Present	Do they ask how you are often or just say we need this, we need this." IT could mean they really need stuff or they are just using us. Or they genuinely need stuff."
40	3.1	WILLING TO ENGAGE	Present	take terp out and engage with locals and try to meet with village leaders and explain current stance. We heard about what happened, we're really sorry, we just got here yesterday, we're here to help. We want to stabilize the village
40	3.1	RAPPORT BUILDING	Present	Bring out soccer balls, toys for kids (probably wouldn't have on first day, though). It's the best way to build rapport. Try to build rapport.
40	3.2	DEDICATION	Present	We handed out stuff to last day, and they still threw rocks at us as we left! Young Soldiers will get restless, best friend killed. They can only take so much. You can't give up. You have to just keep trying to build relationships with locals.
40	3.2	EMOTIONAL SELF REGULATION	Present	We handed out stuff to last day, and they still threw rocks at us as we left! Young Soldiers will get restless, best friend killed. They can only take so much. You can't give up. You have to just keep trying to build relationships with locals.
40	3.5	SENSE- MAKING	Present	The welcome we're getting. The LOOKS. Any rocks hitting truck? Kids, are they running up to trucks waving. Are kids excited about as Dad is smacking them in head for waving?
40	4.2	RELATION BUILDING	Present	If you don't want us to go in, get someone to go in there. Can the family head of

				household come out and talk with us and explain why people are saying this. Higher ups will order us in or send more people in. The biggest mistake is immediately kick in door. Stay calm, use resources, think about relationship.
40	4.2	FLEXIBILITY	Present	If you don't want us to go in, get someone to go in there. Can the family head of household come out and talk with us and explain why people are saying this.
40	4.2	EMOTIONAL SELF REGULATION	Present	Biggest mistake is immediately kick in door. Stay calm, use resources, think about relationship.
40	4.4	OPENNESS	Present	realizes you've built relationships, so take time and resources to step back and think what's best COA. Don't do anything on your own. Talk to ops, cmdr. (AGAIN, Patience coming in)
40	5.3	EMOTIONAL SELF REGULATION	Absent	We've been out here for months trying to help you guys, thousands of miles away from home and you're sitting here holing up one of the top insurgents in the country. Why should we ever trust you again? He should be apologizing to us. This is a relationship breaker. (VERY EMOTIONAL RIGHT NOW--RECENTLY RETURNED FROM AFGHAN)
				40 5.4 EMOTIONAL SELF REGULATION -1 I would just get out of there, and I would have NOTHING to say to him. Tell him he lost my trust and that's that."
40	5.4	OPENNESS	Absent	I would just get out of there, and I would have NOTHING to say to him. Tell him he lost my trust and that's that.
40	5.5	MANIPULATE	Present	This is the point where you actually have the ball in your court, but you don't have to

				be nice to him anymore. Now that they have chips to bargain with at this point. Most things coming out of my mouth would be why should we trust you? (VERY emotional right now). I would pretty much be starting from scratch. Give me some intel.
40	5.6	MANIPULATE	Present	Not being tactful, not getting all the info you can. This situation is a jackpot, gives you all the power you need. Not using it to your advantage is the worst outcome except for complete fallout of full village.
40	5.7	EMOTIONAL SELF REGULATION	Present	Thinking he can never trust anyone. Throwing it all away. Getting too caught on one situation. Thinks he cannot trust anyone every again. If you can't trust leader, need to talk to locals to try to find someone you can trust.
40	6.1	PERSPECTIVE TAKING	Absent	Not caring, not understanding importance of fit. It's a huge problem over there.
40	6.2	CULTURAL AWARENESS	Absent	On our end, it's always a give give give thing. On their end, it's I need this.
40	6.3	OPENNESS	Absent	They've been there for 9 months, they know that they always want something. They always want something!